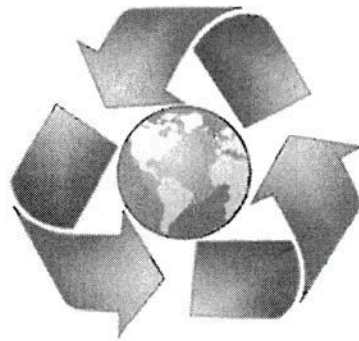


*Application to Process Asphalt  
Shingles in a Recycling Facility*



R&M Recycling, LLC  
924 Heald Street  
Wilmington, DE 19801

# R&M Recycling, LLC

## Application to Process Asphalt Shingles in a Recycling Facility

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## CHECKLIST FOR PERSONS APPLYING FOR A RECYCLING PERMIT OR COMPOSTING PERMIT

Applications for a Recycling Permit or Composting Permit will not be processed unless all of the following information is provided by the applicant. The following checklist is based upon the specific requirements contained in Delaware's *Regulations Governing Solid Waste* (DRGSW). Please use this checklist to ensure the application contains all necessary documentation.

1. Application for a Recycling Permit or Composting Permit
2. Proof of ownership of the property, or copy of lease agreement
3. Written verification from the local zoning authority that the proposed activity is allowable at the proposed location
4. A Plan of Operation including a site map and complete description of the equipment, process, and operating procedures, as well as the maximum quantity of feedstocks and product to be stockpiled
5. Evidence that the product use will not adversely affect human health and the environment. This may require analyses and other tests.
6. Contracts or letters of intent from buyers showing there is a true market for the product
7. A Conceptual Closure Plan [pursuant to Section 4.4.1 of the DRGSW]
8. Evidence of financial assurance demonstrating financial responsibility for closure, as described in DRGSW Sec. 4.1.11.2
9. Proof that all applicable permits, licenses, and approvals have been obtained or applied for [pursuant to Section 4.4.1 of the DRGSW]
10. Background statement [pursuant to **7 Del. C.** Chapter 79]
11. Submit 3 copies of the completed application package as well as an electronic copy in \*.pdf format. Please submit the application and supporting documentation to:

Zack Taylor  
Department of Natural Resources and Environmental Control  
Compliance & Permitting Section  
89 Kings Highway  
Dover, DE 19901  
[Zachary.Taylor@Delaware.gov](mailto:Zachary.Taylor@Delaware.gov)

**Exhibit 1**

*Recycling Permit Application*





Delaware Department of Natural Resources and Environmental Control  
Solid and Hazardous Waste Management Section

**RECYCLING PERMIT APPLICATION**

INSTRUCTION: The applicant may claim that some of the information presented in this Application is confidential. An applicant wishing to make such a claim should write, preferably in red ink, "Claimed Confidential Information" at each point in the response where such confidentiality is claimed. The applicant must provide an explanation of why the release of such information would constitute an invasion of personal privacy or would seriously affect the applicant's business or competitive situation. The confidentiality determination will be subject to the **FOIA Regulation**, Section 6.

**BRIEF DESCRIPTION OF RECYCLING ACTIVITY OR BENEFICIAL USE PROCESS**

Recycling of Asphalt Shingles

**FACILITY INFORMATION**

Facility Name: R & M Recycling, LLC

Address: 924 South Heald Street

|                                    |  |  |
|------------------------------------|--|--|
| City: Wilmington                   | County: New Castle                           | State: Delaware                                |
| Zip Code: 19801                    | Phone: 302-658-6524                          | Fax: 302-658-0684                              |
| Total Site Area (Acres): 1.1 Acres | Latitude: 39 degrees 43 minutes 20 seconds N | Longitude: -75 degrees 32 minutes 47 seconds W |

Tax Parcel Number (s): 10-001.00-042; 10-001.00-043; 10-001.00-044; 10-001.00-045; 10-001.00-075

Expected Service Area: The surrounding area is the expected Service Area for both incoming and outgoing material.

**BUSINESS OWNER INFORMATION**

Owner's Name: R & M Recycling, LLC

Contact Person: Richard E. Pierson Jr. Title: President

Address: 924 South Heald Street

|                     |                   |                 |
|---------------------|-------------------|-----------------|
| City: Wilmington    | State: Delaware   | Zip Code: 19801 |
| Phone: 302-658-6524 | Fax: 302-658-0684 | Email:          |

**FACILITY OPERATOR INFORMATION**

Operator's Name: R & M Recycling, LLC

Contact Person: Paul Lester Title: Vice President

Address: 242 North James Street Suite 102

|                     |                   |                                     |
|---------------------|-------------------|-------------------------------------|
| City: Newport       | State: Delaware   | Zip Code: 19804                     |
| Phone: 302-658-6524 | Fax: 302-658-0684 | Email: plester@diamondmaterials.com |

**OPERATING HOURS**

Daily Operating Hours: 7:00am – 7:00pm Daily Business Hours (Open to Public): 7:00am- 5:00pm Daily

Days of Operation: Number of Operating Days Per Year:

**Monday Through Saturday 300**



### RECYCLING PERMIT APPLICATION

#### ESTIMATED QUANTITIES OF RECYCLABLE MATERIAL AND PRODUCT:

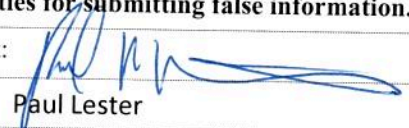
Maximum Daily Tonnage of Recyclable Material to be Accepted: 300 tons      Daily  Weekly

Maximum Tonnage of Recyclable Material to be Stored (at any given time): 8,000 tons

Maximum Tonnage of Product to be Stored (at any given time): 1,000

*NOTE: Maximum daily and weekly tonnages must consider operating hours and days specified on next page.*

**I certify under penalty of law, that I have personally examined and am familiar with the information submitted in the Application and all supporting documentation and that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information.**

|   |                                       |
|---|---------------------------------------|
| Signature of applicant:  | Date: 3/29/2021                       |
| • Printed Name: Paul Lester   | Phone: 302-658-6524                   |
| Title: Vice President   | Email: : plester@diamondmaterials.com |
| Company: R & M Recycling, LLC   |                                       |
| Address: : 924 South Heald Street   |                                       |
| City: Wilmington  | State: Delaware      Zip Code: 19801  |

**Exhibit 2**

*Ownership Information*



## COMMERCIAL LEASE AGREEMENT

This Commercial Lease Agreement ("Lease") is made and effective March 21, 2013, by and between Concrete & Material Company of South Jersey ("Landlord") and Diamond Materials LLC ("Tenant").

Landlord hereby leases and lets to Tenant the premises described as follows (hereinafter the "Leased Premises"): property at 924 South Heald Street, Wilmington DE 19801.

Parcels:           10-001.00-042  
                      10-001.00-043  
                      10-001.00-044  
                      10-001.00-045  
                      10-001.00-075

Landlord desires to lease the Leased Premises to Tenant, and Tenant desires to lease the Leased Premises from Landlord for the term, at the rental and upon the covenants, conditions and provisions herein set forth.

THEREFORE, in consideration of the mutual promises herein, contained and other good and valuable consideration, it is agreed:

### 1. Term.

A. Landlord hereby leases the Leased Premises to Tenant, and Tenant hereby leases the same from Landlord, for an "Initial Term" beginning November 4, 2005 and ending December 31, 2025. Landlord shall use its best efforts to give Tenant possession as nearly as possible at the beginning of the Lease term. If Landlord is unable to timely provide the Leased Premises, rent shall abate for the period of delay. Tenant shall make no other claim against Landlord for any such delay.

B. Tenant may renew the Lease for one extended term of one year. Tenant shall exercise such renewal option, if at all; by giving written notice to Landlord not less than ninety (90) days prior to the expiration of the Initial Term. The renewal term shall be at the rental set forth below and otherwise upon the same covenants, conditions and provisions as provided in this Lease.

### 2. Rental.

A. Tenant shall pay to Landlord during the Initial Term rental of \$ 64,836.00 per year, payable in installments of \$ 5,403.00 per month. Each installment payment shall be due in advance on the first day of each calendar month during the lease term to Landlord at 924 South Heald Street, Wilmington, DE 19801 or at such other place designated by written notice from Landlord or Tenant. The rental payment amount for any partial calendar months included in the lease term shall be prorated on a daily basis.

B. The rental for any renewal lease term, if created as permitted under this Lease, shall be determined at time of Lease Renewal.

### 3. Use

Notwithstanding the forgoing, Tenant shall not use the Leased Premises for the purposes of storing, manufacturing or selling any explosives, flammables or other inherently dangerous substance, chemical, thing or device.

### 4. Sublease and Assignment.

Tenant shall have the right without Landlord's consent, to assign this Lease to a corporation with which Tenant may merge or consolidate, to any subsidiary of Tenant, to any corporation under common control with Tenant, or to a purchaser of substantially all of Tenant's assets. Except as set forth above, Tenant shall not sublease all

or any part of the Leased Premises, or assign this Lease in whole or in part without Landlord's consent, such consent not to be unreasonably withheld or delayed.

#### **5. Repairs.**

During the Lease term, Tenant shall make, at Tenant's expense, all necessary repairs to the Leased Premises. Repairs shall include such items as routine repairs of floors, walls, ceilings, and other parts of the Leased Premises damaged or worn through normal occupancy, except for major mechanical systems or the roof, subject to the obligations of the parties otherwise set forth in this Lease.

#### **6. Alterations and Improvements.**

Tenant, at Tenant's expense, shall have the right following Landlord's consent to remodel, redecorate, and make additions, improvements and replacements of and to all or any part of the Leased Premises from time to time as Tenant may deem desirable, provided the same are made in a workmanlike manner and utilizing good quality materials. Tenant shall have the right to place and install personal property, trade fixtures, equipment and other temporary installations in and upon the Leased Premises, and fasten the same to the premises. All personal property, equipment, machinery, trade fixtures and temporary installations, whether acquired by Tenant at the commencement of the Lease term or placed or installed on the Leased Premises by Tenant thereafter, shall remain Tenant's property free and clear of any claim by Landlord. Tenant shall have the right to remove the same at any time during the term of this Lease provided that all damage to the Leased Premises caused by such removal shall be repaired by Tenant at Tenant's expense.

#### **7. Property Taxes.**

Landlord shall pay, prior to delinquency, all general real estate taxes and installments of special assessments coming due during the Lease term on the Leased Premises, and all personal property taxes with respect to Landlord's personal property, if any, on the Leased Premises. Tenant shall be responsible for paying all personal property taxes with respect to Tenant's personal property at the Leased Premises.

#### **8. Insurance.**

A. If the Leased Premises or any other part of the Building is damaged by fire or other casualty resulting from any act or negligence of Tenant or any of Tenant's agents, employees or invitees, rent shall not be diminished or abated while such damages are under repair, and Tenant shall be responsible for the costs of repair not covered by insurance.

B. Landlord shall maintain fire and extended coverage insurance on the Building and the Leased Premises in such amounts as Landlord shall deem appropriate. Tenant shall be responsible, at its expense, for fire and extended coverage insurance on all of its personal property, including removable trade fixtures, located in the Leased Premises.

C. Tenant and Landlord shall, each at its own expense, maintain a policy or policies of comprehensive general liability insurance with respect to the respective activities of each in the Building with the premiums thereon fully paid on or before due date, issued by and binding upon some insurance company approved by Landlord, such insurance to afford minimum protection of not less than \$1,000,000 combined single limit coverage of bodily injury, property damage or combination thereof. Landlord shall be listed as an additional insured on Tenant's policy or policies of comprehensive general liability insurance, and Tenant shall provide Landlord with current Certificates of Insurance evidencing Tenant's compliance with this Paragraph. Tenant shall obtain the agreement of Tenant's insurers to notify Landlord that a policy is due to expire at least (10) days prior to such expiration. Landlord shall not be required to maintain insurance against thefts within the Leased Premises or the Building.

#### **9. Utilities.**

Tenant shall pay all charges for water, sewer, gas, electricity, telephone and other services and utilities used by Tenant on the Leased Premises during the term of this Lease unless otherwise expressly agreed in writing by



Landlord. In the event that any utility or service provided to the Leased Premises is not separately metered, Landlord shall pay the amount due and separately invoice Tenant for Tenant's pro rata share of the charges. Tenant shall pay such amounts within fifteen (15) days of invoice. Tenant acknowledges that the Leased Premises are designed to provide standard office use electrical facilities and standard office lighting. Tenant shall not use any equipment or devices that utilize excessive electrical energy or which may, in Landlord's reasonable opinion, overload the wiring or interfere with electrical services to other tenants.

#### **10. Signs.**

Following Landlord's consent, Tenant shall have the right to place on the Leased Premises, at locations selected by Tenant, any signs which are permitted by applicable zoning ordinances and private restrictions. Landlord may refuse consent to any proposed signage that is in Landlord's opinion too large, deceptive, unattractive or otherwise inconsistent with or inappropriate to the Leased Premises or use of any other tenant. Landlord shall assist and cooperate with Tenant in obtaining any necessary permission from governmental authorities or adjoining owners and occupants for Tenant to place or construct the foregoing signs. Tenant shall repair all damage to the Leased Premises resulting from the removal of signs installed by Tenant.

#### **11. Entry.**

Landlord shall have the right to enter upon the Leased Premises at reasonable hours to inspect the same, provided Landlord shall not thereby unreasonably interfere with Tenant's business on the Leased Premises.

#### **12. Damage and Destruction.**

Subject to Section 8 A. above, if the Leased Premises or any part thereof or any appurtenance thereto is so damaged by fire, casualty or structural defects that the same cannot be used for Tenant's purposes, then Tenant shall have the right within ninety (90) days following damage to elect by notice to Landlord to terminate this Lease as of the date of such damage. In the event of minor damage to any part of the Leased Premises, and if such damage does not render the Leased Premises unusable for Tenant's purposes, Landlord shall promptly repair such damage at the cost of the Landlord. In making the repairs called for in this paragraph, Landlord shall not be liable for any delays resulting from strikes, governmental restrictions, inability to obtain necessary materials or labor or other matters which are beyond the reasonable control of Landlord. Tenant shall be relieved from paying rent and other charges during any portion of the Lease term that the Leased Premises are inoperable or unfit for occupancy, or use, in whole or in part, for Tenant's purposes. Rentals and other charges paid in advance for any such periods shall be credited on the next ensuing payments, if any, but if no further payments are to be made, any such advance payments shall be refunded to Tenant. The provisions of this paragraph extend not only to the matters aforesaid, but also to any occurrence which is beyond Tenant's reasonable control and which renders the Leased Premises, or any appurtenance thereto, inoperable or unfit for occupancy or use, in whole or in part, for Tenant's purposes.

#### **13. Default.**

If default shall at any time be made by Tenant in the payment of rent when due to Landlord as herein provided, and if said default shall continue for fifteen (15) days after written notice thereof shall have been given to Tenant by Landlord, or if default shall be made in any of the other covenants or conditions to be kept, observed and performed by Tenant, and such default shall continue for thirty (30) days after notice thereof in writing to Tenant by Landlord without correction thereof then having been commenced and thereafter diligently prosecuted, Landlord may declare the term of this Lease ended and terminated by giving Tenant written notice of such intention, and if possession of the Leased Premises is not surrendered, Landlord may reenter said premises. Landlord shall have, in addition to the remedy above provided, any other right or remedy available to Landlord on account of any Tenant default, either in law or equity. Landlord shall use reasonable efforts to mitigate its damages.

#### **14. Condemnation.**



If any legally, constituted authority condemns the Building or such part thereof which shall make the Leased Premises unsuitable for leasing, this Lease shall cease when the public authority takes possession, and Landlord and Tenant shall account for rental as of that date. Such termination shall be without prejudice to the rights of either party to recover compensation from the condemning authority for any loss or damage caused by the condemnation. Neither party shall have any rights in or to any award made to the other by the condemning authority.

#### **15. Subordination.**

Tenant accepts this Lease subject and subordinate to any mortgage, deed of trust or other lien presently existing or hereafter arising upon the Leased Premises, or upon the Building and to any renewals, refinancing and extensions thereof, but Tenant agrees that any such mortgagee shall have the right at any time to subordinate such mortgage, deed of trust or other lien to this Lease on such terms and subject to such conditions as such mortgagee may deem appropriate in its discretion. Landlord is hereby irrevocably vested with full power and authority to subordinate this Lease to any mortgage, deed of trust or other lien now existing or hereafter placed upon the Leased Premises of the Building, and Tenant agrees upon demand to execute such further instruments subordinating this Lease or attorning to the holder of any such liens as Landlord may request. In the event that Tenant should fail to execute any instrument of subordination herein required to be executed by Tenant promptly as requested, Tenant hereby irrevocably constitutes Landlord as its attorney-in-fact to execute such instrument in Tenant's name, place and stead, it being agreed that such power is one coupled with an interest. Tenant agrees that it will from time to time upon request by Landlord execute and deliver to such persons as Landlord shall request a statement in recordable form certifying that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as so modified), stating the dates to which rent and other charges payable under this Lease have been paid, stating that Landlord is not in default hereunder (or if Tenant alleges a default stating the nature of such alleged default) and further stating such other matters as Landlord shall reasonably require.

#### **16. Notice.**

Any notice required or permitted under this Lease shall be deemed sufficiently given or served if sent by United States certified mail, return receipt requested, addressed as follows:

*If to Landlord to:*

Concrete & Material Company of South Jersey  
924 South Heald Street  
Wilmington, DE 19801

*If to Tenant to:*

Diamond Materials LLC  
924 South Heald Street  
Wilmington, DE 19801

Landlord and Tenant shall each have the right from time to time to change the place notice is to be given under this paragraph by written notice thereof to the other party.

#### **17. Brokers.**

Tenant represents that Tenant was not shown the Premises by any real estate broker or agent and that Tenant has not otherwise engaged in, any activity which could form the basis for a claim for real estate commission, brokerage fee, finder's fee or other similar charge, in connection with this Lease.

#### **18. Waiver.**

No waiver of any default of Landlord or Tenant hereunder shall be implied from any omission to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated. One or more waivers by Landlord or Tenant shall not be construed as a waiver of a subsequent breach of the same covenant, term or condition.

#### **19. Memorandum of Lease.**

The parties hereto contemplate that this Lease should not and shall not be filed for record, but in lieu thereof, at the request of either party, Landlord and Tenant shall execute a Memorandum of Lease to be recorded for the purpose of giving record notice of the appropriate provisions of this Lease.

**20. Headings.**

The headings used in this Lease are for convenience of the parties only and shall not be considered in interpreting the meaning of any provision of this Lease.

**21. Successors.**

The provisions of this Lease shall extend to and be binding upon Landlord and Tenant and their respective legal representatives, successors and assigns.

**22. Consent.**

Landlord shall not unreasonably withhold or delay its consent with respect to any matter for which Landlord's consent is required or desirable under this Lease.

**23. Performance.**

If there is a default with respect to any of Landlord's covenants, warranties or representations under this Lease, and if the default continues more than fifteen (15) days after notice in writing from Tenant to Landlord specifying the default, Tenant may, at its option and without affecting any other remedy hereunder, cure such default and deduct the cost thereof from the next accruing installment or installments of rent payable hereunder until Tenant shall have been fully reimbursed for such expenditures, together with interest thereon at a rate equal to the lessor of twelve percent (12%) per annum or the then highest lawful rate. If this Lease terminates prior to Tenant's receiving full reimbursement, Landlord shall pay the unreimbursed balance plus accrued interest to Tenant on demand.

**24. Compliance with Law.**

Tenant shall comply with all laws, orders, ordinances and other public requirements now or hereafter pertaining to Tenant's use of the Leased Premises. Landlord shall comply with all laws, orders, ordinances and other public requirements now or hereafter affecting the Leased Premises.

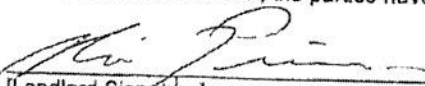
**25. Final Agreement.**

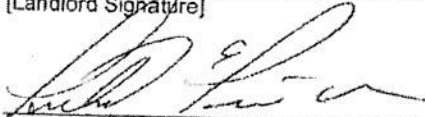
This Agreement terminates and supersedes all prior understandings or agreements on the subject matter hereof. This Agreement may be modified only by a further writing that is duly executed by both parties.

**26. Governing Law.**

This Agreement shall be governed, construed and interpreted by, through and under the Laws of the State of New Jersey.

IN WITNESS WHEREOF, the parties have executed this Lease as of the day and year first above written.

  
\_\_\_\_\_  
[Landlord Signature]

  
\_\_\_\_\_  
[Tenant Signature]

20051107-0114120  
Pages: E F: \$82.00  
11/07/05 09:43:02 AM  
T20050090822  
Michael E. Kozikowski  
New Castle Recorder DEE

Tax Parcel No 10-001.00-043  
10.001.00-044  
10-001.00-045  
Prepared By/ Return To:  
Figliola & Facciolo  
1813 Marsh Road, Suite A  
Wilmington, DE 19810

THIS DEED, MADE this 4 th day of November, in the year of our Lord,  
Two Thousand Five

BETWEEN, Quentin D. Saienni, of New Castle County, State of  
Delaware, party of the first part

AND

Concrete and Material Company of South Jersey, L.L.C. a Delaware  
Limited Liability Company, party of the second part.

WITNESSETH, that the said parties of the first part, for and in  
consideration of the sum of One Million Five Hundred Thousand ----- 00/100 Dollars  
(\$1,500,000.00 ) lawful money of the United States of America, the receipt whereof is  
hereby acknowledged, hereby grants and conveys unto the said party of the second part.

**LEGAL DESCRIPTION ATTACHED**

Grantees Address:  
924 South Heald Street  
Wilmington, DE 19801

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LEGAL DESCRIPTION PARCEL NOS. 10-001.00-043 & 044

shown as Tax Parcel No. 10-001.00-044 on the Boundary Survey Plan for lands of the same as prepared for Quentin Saienni by Ramesh C. Batra Associates, P.A., dated November 09, 2000, and situated between the southeasterly side of South Heald Street and the northwesterly side of New Castle Avenue directly south of the City of Wilmington Corporate Limits in New Castle Hundred, New Castle County, Delaware, said parcel being more particularly described as follows, to wit:

BEGINNING at a common corner for the parcel herein being described and other lands now or formerly Salvatore J. Saienni (Tax Parcel No. 10-001.00-045), lands now or formerly Si-An Properties (Tax Parcel No. 10-001.00-048) and lands now or formerly Heald Street L.L.C. (Tax Parcel No. 10-001.00-047), said point being further located the eight (8) following described courses and distances from the intersection of the northwesterly side of New Castle Avenue, at varying widths, with the northeasterly side of the Delaware River Extension of the Wilmington and Northern Railroad Company; said northeasterly side of the Delaware River Extension of the Wilmington and Northern Railroad Company being distant 30 feet northeasterly from its centerline of track thereof, when measured at right angles; thereto, (1) by a curve to the right in a northeasterly direction having a radius of 11419.00 feet an arc distance of 81.54 feet to a point; last described point also located, North 18 Degrees 08 Minutes 48 Seconds East along a chord having a distance of 81.54 feet, (2) North 17 Degrees 36 Minutes 48 Seconds East, a distance of 644.36 feet to a point, (3) North 16 Degrees 28 Minutes 48 Seconds East, a distance of 58.64 feet to the point of curvature of a curve having a radius of 11420.00 feet, (4) by said 11420.00 feet radius curve to the left in a northeasterly direction an arc distance of 198.51 feet to the point of compound curvature of a curve having a radius of 1909.86 feet, last described point also located North 15 Degrees 58 Minutes 55 Seconds East along a chord having a distance of 198.51 feet, (5) by said 1909.86 feet radius curve to the left in a northeasterly direction an arc distance of 75.23 feet to a common corner for said other lands now or formerly Salvatore J. Saienni and lands now or formerly the City of Wilmington (Tax Parcel No. 10-001.00-046), last described point being distant 42.27 feet northwesterly of the centerline of said New Castle Avenue when measured at right angles thereto, and further located North 15 Degrees 34 Minutes 36 Seconds East along a chord having a distance of 75.23 feet; (6) thence along said lands now or formerly the City of Wilmington, the two (2) following described courses and distances: (1) North 69

34 Minutes 32 seconds West, a distance of 377.69 feet, passing over an existing iron pipe at 376.79 feet, to a corner for said parcel herein being described and other lands now or formerly Salvatore J. Saienni (Tax Parcel No. 10-001.00-044), thence along said other lands of Salvatore J. Saienni, North 24 Degrees 17 Minutes 45 Seconds East, a distance of 655.16 to a corner (set iron pipe) for said parcel herein being described in line of lands now or formerly Frank C. Caldwell and Martha R. Caldwell (Tax Parcel No. 10-001.00-039), thence along said line of lands now or formerly Frank C. Caldwell and Martha R. Caldwell, along or near an existing concrete block wall, in part, South 70 Degrees 09 Minutes 00 Seconds East, a distance of 182.43 feet to a corner for said parcel herein being described and lands now or formerly Conrad Q. Williams, thence along said lands now or formerly Conrad Q. Williams, and along lands now or formerly James W. Hackett and Minnie J. Hackett (Tax Parcel No. 10-001.00-041), the two (2) following described courses and distances: (1) approximately parallel with the said concrete block wall, in part, and distant 11.7 feet, more or less, southeasterly from its southeasterly face, South 15 Degrees 36 Minutes 18 Seconds West, a distance of 116.37 feet to a corner (set PK nail), and (2) along or near an existing paved driveway, in part, extending westerly from said New Castle Avenue and distant 3.9 feet, more or less, northeasterly from its northeasterly edge, South 70 Degrees 09 Minutes 00 Seconds East, a distance of 180.31 feet to a corner (found iron pipe) for said parcel herein being described on the said northwesterly side of New Castle Avenue, said northwesterly side of New Castle Avenue being distant 55.00 feet northwesterly from its centerline; thereof, when measured at right angles; thereto, thence along the said northwesterly side of New Castle Avenue the three (3) following described courses and distances: (1) South 15 Degrees 36 Minutes 46 seconds West, a distance of 244.30 feet to the point of curvature (set PK nail) of a curve having a radius of 1909.86 feet, (2) by said 1909.86 feet radius curve to the left in a southwesterly direction an arc distance of 169.31 feet to the point of reverse curvature (set iron pipe) of a curve having a radius of 1909.86 feet, last described point also located South 13 Degrees 03 Minutes 58 Seconds West along a chord having a distance of 169.26 feet, and (3) by said 1909.86 feet radius reverse curve to the right in a southwesterly direction an arc distance of 76.14 feet to a corner for said parcel herein being described and said lands now or formerly the City of Wilmington, the point and place of BEGINNING, last described point also located South 11 Degrees 41 Minutes 20 Seconds West along a chord having a distance of 76.14 feet, containing within said described metes and bounds, 5.61 +/- acres of land, be the same more or less. Subject to any and all agreements, easements, mortgages and restrictions of record.



LEGAL DESCRIPTION PARCEL NO. 10-001.00-045

shown as Tax Parcel No. 10-001.00-045 on the Boundary Survey Plan for lands of the same as prepared for Quentin Saienni by Ramesh C. Batta Associates, P.A., dated November 09, 2000, and situated between the southeasterly side of South Heald Street and the northwesterly side of New Castle Avenue directly south of the City of Wilmington Corporate Limits in New Castle Hundred, New Castle County, Delaware, said parcel being more particularly described as follows, to wit:

BEGINNING at a point (set iron pipe) on the northwesterly side of New Castle Avenue at varying widths; said point, being a common corner for the parcel herein being described and lands now or formerly the City of Wilmington (Tax Parcel No. 10-001.00-046) and; being distant 42.27 feet northwesterly from the centerline of said New Castle Avenue, when measured at right angles, and further located along the said northwesterly side of New Castle Avenue the five (5) following described courses and distances from its intersection with the northeasterly side of the Delaware River Extension of the Wilmington and Northern Railroad Company; said northeasterly side of the Delaware River Extension of the Wilmington and Northern Railroad Company being distant 30 feet northeasterly from its centerline of track thereof; when measured at right angles; thereto, (1) by a curve to the right in a northeasterly direction having a radius of 11419.00 feet an arc distance of 81.54 feet to a point; last described point also located, North 18 Degrees 08 Minutes 48 Seconds East along a chord having a distance of 81.54 feet, (2) North 17 Degrees 36 Minutes 48 Seconds East, a distance of 644.36 feet to a point, (3) North 16 Degrees 28 Minutes 48 Seconds East, a distance of 58.64 feet to the point of curvature of a curve having a radius of 11420.00 feet, (4) by said 11420.00 feet radius curve to the left in a northeasterly direction an arc distance of 198.51 feet to the point of compound curvature of a curve having a radius of 1909.86 feet, last described point also located North 15 Degrees 58 Minutes 55 Seconds East along a chord having a distance of 198.51 feet, and (5) by said 1909.86 feet radius curve to the left in a northeasterly direction an arc distance of 75.23 feet, last described point also located North 15 Degrees 34 Minutes 36 Seconds East along a chord having a distance of 75.23 feet; thence from said point of BEGINNING, along said lands now of formerly the City of Wilmington, the two (2) following described courses and distances: (1) North 69 Degrees 34 Minutes 32 Seconds West, a distance of 97.72 feet to a point, and (2) South 15 Degrees 21 Minutes 28 Seconds West, a distance of 75.00 feet to a corner (set iron pipe) for said parcel herein being described in line of lands now or formerly Si-An Properties (Tax Parcel No. 10-001.00-048), thence along said line of lands now or formerly Si-An Properties, North 69 degrees

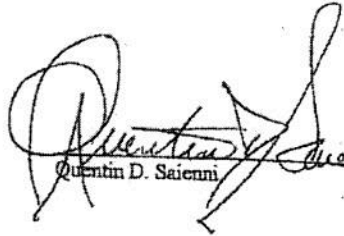


Degrees 34 Minutes 32 Seconds West, a distance of 97.72 feet to a point, and (2) South 15 Degrees 21 Minutes 28 Seconds West, a distance of 75.00 feet to a corner (set iron pipe) for said parcel herein being described in line of lands now or formerly Si-An Properties (Tax Parcel No. 10-001.00-048), thence along said line of lands now or formerly Si-An Properties, North 69 degrees 34 Minutes 32 seconds West, a distance of 377.69 feet, passing over an existing iron pipe at 376.79 feet; thence from said point of BEGINNING, along said lands now or formerly Heald Street L.L.C., the three (3) following described courses and distances: (1) North 69 Degrees 27 Minutes 30 Seconds West, a distance of 404.19 to a corner (set iron pipe), (2) North 43 Degrees 47 Minutes 30 Seconds East, a distance of 9.90 feet to a point (near a found iron pipe), and (3) North 06 Degrees 48 Minutes 30 Seconds West, a distance of 217.48 feet to corner (set PK nail) for said parcel herein being described on the southeasterly side of South Heald Street at 80 feet wide, thence along the said southeasterly side of Heald Street, North 27 Degrees 52 Minutes 30 Seconds East, a distance of 460.37 feet to a corner (set iron pipe) for said parcel herein being described and lands now or formerly Ronald C. Palimere and Eileen M. Palimere (Tax Parcel No. 10-001.00-038), thence along said lands now or formerly Ronald C. Palimere and Eileen M. Palimere, along or near the northeasterly face of an existing concrete block wall, in part, and distant southwesterly 9.8 feet and 9.55 feet, more or less, from the southwesterly side of an existing brick building wall when measured at right angles thereto, South 70 Degrees 09 Minutes 00 Seconds East, a distance of 299.21 feet to a corner for said parcel herein being described and lands now or formerly Frank C. Caldwell and Martha R. Caldwell (Tax Parcel No. 10-001.00-039), thence along said lands now or formerly Frank C. Caldwell and Martha R. Caldwell, the two (2) following described courses and distances: (1) South 17 Degrees 00 Minutes 00 Seconds West, a distance of 10.98 feet to a point, and (2) along or near an existing concrete block wall, in part, South 70 Degrees 09 Minutes 00 Seconds East, a distance of 184.48 feet to a corner (set iron pipe) for said parcel herein being described and said other lands now or formerly Salvatore J. Saienni (Tax Parcel No. 10-001.00-045), thence along said other lands now or formerly Salvatore J. Saienni, South 24 Degrees 17 Minutes 45 Seconds West, a distance of 655.16 feet to a corner for said parcel herein being described and said lands now or formerly Si-An Properties, the point and place of BEGINNING. Containing within said described metes and bounds, 7.33 +/- acres of land, be the same more or less. Subject to any and all agreements, easements, mortgages and restrictions of record.

BEING the same lands and premises which Salvatore J. Saienni, by Deed dated October 12, 2000 and Recorded October 30, 2000 in the office for the recording of deeds for New Castle County, Delaware in Deed Book 2916, Page 80 did grant and convey unto Quentin D. Saienni.

Scaled and Delivered in the Presence of:

  
Witness

  
Quentin D. Saienni (SEAL)

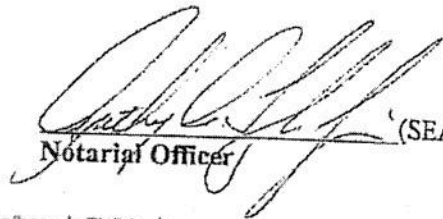
\_\_\_\_\_  
Witness

\_\_\_\_\_  
(SEAL)

STATE OF DELAWARE ]  
NEW CASTLE COUNTY ]

Be it remembered, that on this 4<sup>th</sup> day of November in the year of our Lord, Two Thousand Five, personally came before me Quentin D. Saienni and in my presence acknowledged that the signing of this document was his true act and deed.

GIVEN under my hand and Seal of Office, the day and year aforesaid.

  
Notarial Officer (SEAL)

Anthony A. Figliola, Jr.  
Attorney-At-Law  
Delaware Bar No. 957  
Notarial Officer

Tax Parcel No 10-001.00-042  
10-001.00-075  
Prepared By/ Return To:  
Figliola & Facciolo  
1813 Marsh Road, Suite A  
Wilmington, DE 19810

**THIS DEED, MADE** this 4 th day of November, in the year of our Lord,  
Two Thousand Five

**BETWEEN,** Diamond Materials, LLC a Delaware limited liability  
Company, party of the first part

**AND**

Concrete and Material Company of South Jersey, L.L.C. a Delaware  
Limited Liability Company, party of the second part.

**WITNESSETH,** that the said parties of the first part, for and in  
consideration of the sum of Ten ----- 00/100 Dollars ( \$10.00 ) lawful  
money of the United States of America, the receipt whereof is hereby acknowledged,  
hereby grants and conveys unto the said party of the second part.

**LEGAL DESCRIPTION ATTACHED**

Grantees Address:  
924 South Heald Street  
Wilmington, DE 19801

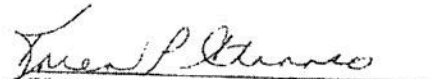
ALL That certain lot, piece or parcel of land situate in New Castle Hundred, New Castle County and State of Delaware and being more particularly bounded and described in accordance with a survey by Van Demark & Lynch, Inc., Civil Engineers and Surveyors, dated November 27, 1974, as follows:


BEGINNING at a point on the Northeasterly side of Terminal Thoroughfare Extended, said point of Beginning being distant North seventy degrees, nine minutes West one hundred eighty - five feet and thirty - four one - hundredths of a foot measured along the said Northeasterly side of Terminal Thoroughfare Extended from the point of intersection thereof with the Northwesterly side of New Castle Avenue; thence from said point of Beginning and along the said Northeasterly side of Terminal Thoroughfare Extended North seventy degrees, nine minutes West one hundred ninety - three feet and eighty - two one - hundredths of a foot to a point, a corner for land now or formerly of William Q. Saienni; thence along the Southeasterly line of said land now or formerly of William Q. Saienni, North twenty - four degrees, twenty - nine minutes, ten seconds East one hundred eighteen feet and seventy one - hundredths of a foot to a point in the Southwesterly line of land now or formerly of Peter Cushing; thence thereby South seventy degrees, nine minutes East one hundred seventy - five feet and forty - five one - hundredths of a foot to a point; thence South fifteen degrees, thirty - six minutes, thirty seconds West one hundred eighteen feet and sixty - four one - hundredths of a foot to a point on the said Northeasterly side of Terminal Thoroughfare Extended and to the point and place of BEGINNING.



BEING the same lands and premises which as to 10-001.00-042, known as 4145 A Terminal Avenue, Wilmington, DE., Tia A. Gianakis - George, by Deed dated September 8, 2005 and Recorded September 9, 2005 in the office for the recording of deeds for New Castle County, Delaware in Instrument No. 20050909 - 0091722 did grant and convey unto Diamond Materials, LLC; as to 10-001.00-075, known as 4145 B Terminal Avenue, Wilmington, DE., Conrad O. Williams, by Deed dated December 10, 1999 and Recorded January 6, 2000 in the office for the recording for New Castle County, Delaware in Deed Book 2769, Page 119 did grant and convey unto Diamond Materials, LLC.

Sealed and Delivered in the Presence of:


  
Witness

 (SEAL)  
Diamond Materials, LLC  
by: Richard E. Pierson, Jr., Managing Member

STATE OF DELAWARE ]  
NEW CASTLE COUNTY ]

BE it remembered, that on this 4 th day of November in the year of our Lord, Two Thousand Five, personally came before me Richard E. Pierson, Jr., Managing Member of Diamond Materials, LLC and in my presence acknowledged that the signing of this document was his true act and deed.

GIVEN under my hand and Seal of Office, the day and year aforesaid.

 (SEAL)  
Notarial Officer

**Exhibit 3**

*Zoning Approval*



Matthew S. Meyer  
County Executive



Richard E. Hall, AICP  
General Manager

DEPARTMENT OF LAND USE

August 30, 2021

**In reply, refer to:  
2021-0409-V  
924 Heald Street**

R&M Recycling, LLC  
c/o Elio Battista, Jr. Esq.  
Parkowski, Guerke, & Swayze, P.A.  
1105 North Market Street, 19<sup>th</sup> Floor  
Wilmington, DE 19901

Dear Applicant:

The New Castle County Department of Land Use is in receipt of your request for a verification of zoning and use for tax parcel numbers 10-001.00-042, 10-001.00-043, 10-001.00-044, 10-001.00-045, and 10-001.00-075 which are located at 4137 and 4145 New Castle Avenue, 0 and 922 South Heald Street, and 0 Terminal Avenue in New Castle, Delaware.

A review of the Official Zoning Map of New Castle County indicates that the subject parcel is zoned **HI (Heavy Industry)**, which **permits heavy industrial uses, such as Asphalt Shingle and Coating Materials Manufacturing (NAICS 324122)**, as a **Special Use**, pursuant to Table 40.03.110 and Section 40.33.270.C of the New Castle County Unified Development Code (UDC).

No variances or open building or zoning code violations were found for the subject property in a search of the County tax parcel information system.

Please be advised that this letter only verifies whether the type of use that exists or is proposed on the site – to the extent you described it in your zoning verification application – is permitted, not permitted, or permitted under limited circumstances in the zoning district. **This letter is not a permit and does not offer any guarantee that any other required plans, applications, certifications, or variances for your project will be approved.**

If your project involves an expansion of the existing use, a change of use, alterations to the building or site, demolition, or new construction, one or more permits may be needed before you can initiate the use. The following is a summary of Department of Land Use permits, certificates, and plans that may be required for your project:

Any new use or change of use in an existing building may require:

1. **Limited Use Permit.** If the existing or proposed use is identified as a “limited use” on the first page of this letter you will need to apply for a Limited Use Permit. This application must be accompanied by a site plan, or other supporting documentation, demonstrating that the special standards for that use are met. Refer to Articles 3 and 31 of the Unified Development code for additional information.
2. **Certificate of Use.** To either institute a new use, or expand an existing use, in an existing building you must obtain a Certificate of Use. The Department will determine whether the building meets the building code and parking requirements for such use. Refer to Chapter 6 of the New Castle County Code (Building Code) for additional information.

Any new construction, or alteration or expansion of existing buildings and features on the site may require:

1. **Major or Minor Land Development Plan.** If your project will subdivide land or add more than 1,000 square feet of gross floor area, you must submit a major or minor land development plan. The plan will be reviewed for compliance with the land development criteria outlined in the Unified Development Code. During review of the plan, the Department may hold public hearings and may identify other applications, plans, studies, or permits that need to be submitted before development can commence. Refer to Article 31 of the Unified Development Code for general requirements.
2. **Parking Plan.** If your project requires installation, expansion, or reconfiguration of a parking lot, you will need to submit a parking plan. Refer to Articles 3 and 31 of the Unified Development Code for general requirements.
3. **Building Permit / Demolition Permit / Sign Permit.** If your project will involve altering or enlarging a building (including mechanical systems), demolishing all or part of a building, or installing new signs, you must obtain permits for those activities. During the review of these applications, the Department may identify other applications, plans, studies, or permits that need to be submitted before development can commence. Before the new or improved building can be inhabited, a **Certificate of Occupancy** must be secured from the Department. Refer to Chapter 6, Article 3 of the New Castle County Code (Building Code) for additional information.

This summary of Department of Land Use permit applications is intended only for general informational purposes and is not intended to be inclusive of the comprehensive requirements contained in the New Castle County Code. Please be advised that some of the review processes described above may also require recommendations or decisions from County boards (Planning Board, Historic Review Board, Board of Adjustment, and Resource Protection Area Technical Advisory Committee) or outside agencies. New Castle County must abide by regulations imposed on it by a variety of State and Federal agencies. Accordingly, any of the County permits described above may be subject to additional review processes that address environmental concerns; resource protection; public health, safety, and welfare; and a variety of other issues. In some cases, landowners may need to address the requirements of those agencies independently.

Landowners contemplating a change of use, future development, or alterations to buildings and land are encouraged to engage the services of an engineer, land surveyor, and/or attorney for advice on any physical constraints that may limit development of the property, and guidance on what permits may be needed to commence a new use or development.

General questions regarding the plan review process; building, demolition, and sign permits; and Certificates of Use/Occupancy, can be answered by the Department at 395-5400. Copies of documents such as certificates of occupancy or code violations may be obtained, where applicable and available, by submitting an Information Request Form (FOIA). The form is available online at [www.newcastlede.gov](http://www.newcastlede.gov). Thank you for your attention to this matter.

Sincerely,



Alec Davis  
Planner I



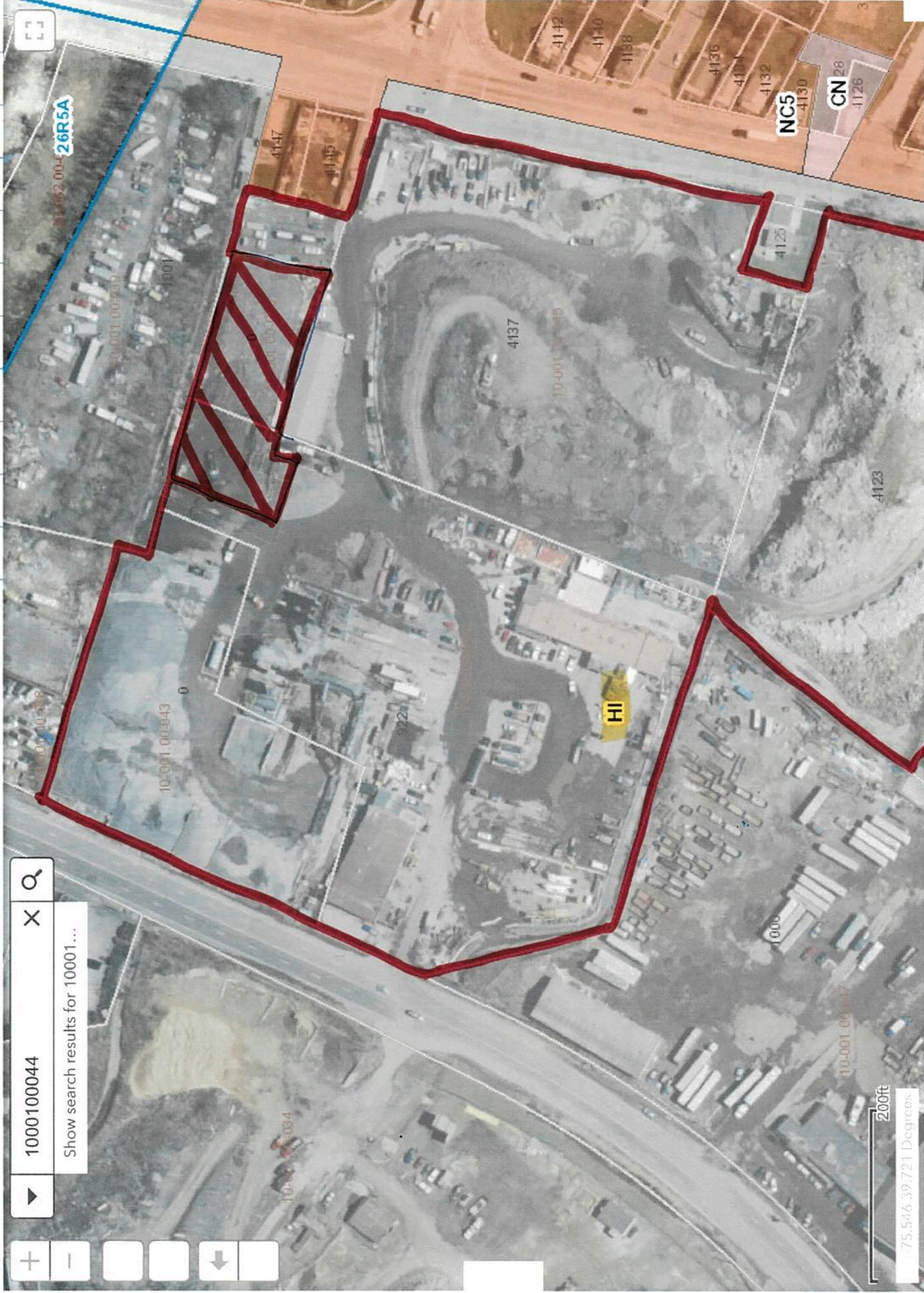


# Explore New Castle County



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decomposition and stabilization of organic substrates, under conditions that allow development of thermophilic temperatures as a result of biologically produced heat, to produce a final product that is stable, free of pathogens and plant seeds, and can be beneficially applied to land.

- B. *Extraction.* This category includes extraction uses such as mining and quarrying, and any other extraction use (NAICS 21).
- C. *Heavy industry.* This category includes construction, mining, manufacturing, transportation, and public utilities due to the land use intensity impacts typically associated with large industrial uses, their accessory outdoor storage uses, and large building areas. The following uses are permitted:
- Animal food, meat product, seafood product manufacturing (NAICS 3111, 3116, 3117)
  - Tobacco manufacturing (NAICS 3122)
  - Breweries, wineries, distilleries other than brewery-pubs and craft alcohol production establishments (NAICS 31212, 31213, 31214)
  - Sawmills (NAICS 3211)
  - Manufactured home manufacturing (NAICS 321991)
  - Pulp, paper and paperboard mills (NAICS 3221)
  - Petroleum refining and related industries (NAICS 324)
  - Chemical manufacturing, including compost operations (NAICS 325)
  - Cement manufacturing (NAICS 32731)
  - Ready-mix concrete manufacturing (NAICS 32732)
  - Other nonmetallic mineral product manufacturing (NAICS 3279)
  - Primary metal manufacturing (NAICS 331)
  - Ammunition (except small arms) manufacturing (NAICS 332993)
  - Transportation equipment manufacturing (NAICS 336, except 3363, 336991)
  - Rail and water freight facilities (NAICS 482, 483)
  - Solid waste landfills (NAICS 562212)
- D. *Light industry.* This category is designed to accommodate limited intensity levels of manufacturing and assembly activities, storage, warehousing, services, associated offices and similar uses. This includes the following uses:

**Exhibit 4**

*Operations Plan*

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# **General Operations Plan**

## **Processing of Asphalt Shingles at the R&M Recycling, LLC Facility**

**R&M Recycling, LLC  
924 Heald Street  
Wilmington, DE 198014**



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| Attachment II:  | Operating Forms and Records                        |
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# **General Operations Plan**

## **1.0 Facility Overview**

### **1.1 Purpose and Regulatory Overview**

This General Operations Plan (“GOP”) details the procedures and operating practices that are employed at the R&M Recycling, LLC. (R&M) asphalt shingles recycling center related to the acceptance and processing of asphalt shingles to produce recycled ground asphalt feed stock for hot/cold mix plants or as road subbase material. The information presented here is intended to comply with the requirements contained in the *Delaware Regulations Governing Solid Waste (“DRGSW”)* for recycling facilities. The R&M facility is located at 924 Health Street, Wilmington, New Castle County, Delaware. The site is east of Heald Street (US 13) and west of New Castle Avenue (SR 9) in New Castle County, Delaware. The site is surrounded by other heavy industrial uses and activities to the North, West, and South, while a residential area is located to the east of the site. R&M’s asphalt recycling operation will be located on a portion of the property as depicted in the site location map included in Attachment I. This portion of the site is approximately 1.1 acres and 283 feet by 161 feet. A site plan of the asphalt shingle recycling area is also provided in Attachment I (Figure 1).

This GOP provides detailed information on the operations of the asphalt shingle facility including; material acceptance, marketing, site access, waste analysis, maintenance, inspections and other related information. The GOP has been developed to ensure that all operations conducted are in compliance with all applicable Federal, State and Local laws and regulations pertaining to recycling facilities. Specifically, this new facility will conduct its recycling operations pursuant to Section 2.5.2 of Regulation 1301 of DRGSW.

### **1.2 General Overview of Operations**

The asphalt shingles processing facility will receive both pre-consumer and post-consumer shingles. Pre-consumer shingles are off-specification shingles from outside manufacturer sources. These are shingles that have not been previously used as roofing cover or roofing material for residential or commercial buildings and structures. Post-consumer shingles are shingles that have previously been used as roofing cover material that result from roof repairs, removals or residential/commercial demolition operations. These post-consumer shingles may be received from construction/demolition contractors, roofers, recycling/collection centers and/or home owners.



The shingles received will be ground and processed at the facility into asphalt feedstock materials that can be processed by asphalt hot or cold mix plants or be resold to be used as pavement for highways and roadways. This process will ultimately divert these shingles from being disposed of in a landfill. The R&M Asphalt Shingles Processing Facility is designed to recycle approximately 62,500 tons of asphalt shingles per year into reusable material.

### **1.3 Property Description**

The R&M Asphalt Shingles Processing Facility will be located at 924 Heald Street, Wilmington, DE 19801. As stated above, the facility is located on a 1.1 acre portion of the property which is zoned for heavy industrial uses and is surrounded by a variety of industrial users, including a scrap metal processing facility and an aggregate storage and processing plant. The site is east of Heald Street (US 13) and west of New Castle Avenue (SR 9) in New Castle County. R&M formerly operated at 1610-1620 Bowers Street, Wilmington, Delaware, 19802.

A Site Plan and Aerial Map of the site are provided as Attachment I to this Operations Plan.

The coordinates of the facility are:

Latitude: 39 degrees 43 minutes 20 seconds N

Longitude: -75 degrees 32 minutes 47 seconds W

## **1.4 Approvals, Licenses, Permits and Zoning**

R&M is located in an HI – Heavy Industrial Zone. A copy of the New Castle County Official Zoning Map, Map No. 37, is included in Exhibit 3 of the application.

The operations rely on the horizontal grinder owned and permitted by R & M Recycling LLC.

## **1.5 Facility Services and Marketplace Overview**

### **1.5.1 Asphalt Shingles**

The facility provides a benefit to the community as an alternative to landfill disposal of asphalt shingles. The asphalt shingles will be ground and processed into a raw material that can be used as pavement or subbase material for highways and roadways or as asphalt hot/cold mix plant feedstock.

The processing equipment used to prepare the recycled shingles will have appropriate controls to minimize dusts (e.g., water spray systems) during operations. The site where the operations will be conducted has a paved surface and will have appropriate controls to minimize potential environmental impacts from the operations.

The facility has the ability to process approximately 62,500 tons per year of these asphalt shingles. The majority of these shingles will come from the regional area surrounding the City of Wilmington and New Castle County, Delaware. Other outlying areas of Delaware or southern Pennsylvania may utilize the facility depending on transportation costs. In addition to the shingles, R&M will maximize the recycling and reuse of any other industrial materials that may be received with the shingles, such as steel, wood and aluminum.

### **1.5.2 End Market Uses**

End market strategies for the R&M processed asphalt shingles include asphalt manufacturing plants/suppliers, private paving companies, public works departments, and State or Federal Departments of Transportation. The processed shingles, once

separated from any metal or wood material, makes an excellent feedstock product for asphalt plants. Private paving companies will create a large market for this after-market good which will enable them to make pavement for use in multiple small scale paving projects. Public works departments may require this material in order to repair areas of roadway and parks in neighboring communities. State and Federal Departments of Transportations may use this product in order to initiate and complete large scale highway paving projects. With increased Federal spending on infrastructure project as a means to create work projects this market should provide a large outlet for R&M to re-sell their materials.



## **2.0 Site Environmental Setting**

### **2.1 Site Location**

The site is located at 924 Heald Street, in Wilmington, Delaware. The site is east of Heald Street (US 13) and west of New Castle Avenue (SR 9) in New Castle County. An aerial map of the site is provided in Attachment I of this plan.

The area dedicated to the asphalt shingles operation occupies approximately 1.1 acres and is approximately 283 feet by 161 feet. The R&M facility is accessed by a common entrance driveway, located on New Castle Avenue. The site includes a security fence and barriers to limit access to the property.

### **2.2 Surrounding Land Use and Topography**

The site is located in a Heavy Industrial – HI Heavy Industrial zoning district. This zoning district is used principally for industrial developments.

The asphalt shingle processing operation is located on an existing Heavy Industrial Site, currently operating as a recycling facility since 1978 by Diamond Materials. Industrial operations border the facility to the west and south, while a commercial operation lies to the north of the site. A residential neighborhood is located 100 feet east of the facility. A city recreational facility, Eden Park, is located 800 feet northeast of the facility. Existing operations at the site include recycling of aggregate materials, thus no new impact to surrounding areas is expected. The topography of the site is generally flat with a slight slope towards the southwest.

### **2.3 Water Sources**

#### **2.3.1 Onsite Water Supplies**

The site is served by utilities from the City of Wilmington, Delaware, however there is no potable water and sanitary sewer at the site. There is no onsite potable water well. A water truck will be available at the site to supply portable water for dust suppression for the grinding equipment, storage piles and roadways.

### **2.3.2 Surface Water Bodies**

The nearest water bodies are various surface impoundments located on the western side of Heald Street, approximately 800 feet west of the facility.

### **2.3.3 Groundwater**

There is no groundwater use for this operation.

## **2.4 Surface Drainage and Stormwater**

### **2.4.1 Designated Flood Plain Areas**

The R&M Recycling site where the processing of asphalt shingles will occur is within the Special Flood Hazard Area subject to inundation by the 1% annual chance flood event (100 year flood). The facility is designed so that, in the event of flooding, any offsite impacts will be minimal. These improvements include wet flood proofing the storage piles so that any flood induced uplifting does not result in materials being transported offsite by the flood waters. This is achieved with the use of jersey barriers/concrete barriers placed on the lower (elevation) sides of the storage piles. The jersey barriers will be placed so that flood waters are allowed to enter the storage area but any uplifted materials such as shingles or portions of shingles are retained within the barriers. The height of jersey barriers will be above the Base Flood Elevation so that the flood waters will not overtop the barriers during the 1% chance flood event.

### **2.4.2 Onsite Drainage Controls**

The asphalt shingle processing operation will be located on a hard packed gravel surface. The site slopes gently to the eastern and southern edges of the site will have jersey barriers in place to reduce the amount of sediment carried offsite via stormwater flows. Additional Best Management Practices (“BMPs”) will be put in place to assist controlling potential pollutants in the stormwater.

## **2.5 Wetlands**

There are no designed freshwater wetlands on the property where the facility is located. No onsite operations will be conducted in freshwater wetlands or protected zones.

## **2.6 Nuisance Dusts, Odors, and Litter**

### **2.6.1 Dust Management Plan**

R&M will employ various methods to control the generation of fugitive dust from the site operations. Any dust created from the handling or processing of the asphalt shingles will be controlled through using appropriate water spray systems affixed or associated with the facility's processing equipment. R&M has access to adequate water supplies and appropriate equipment to allow site personnel to wet down the piles of unprocessed and processed shingle materials stored onsite as needed. This measure will be employed on an as needed basis to minimize the amount of dust that could blow off the piles when seasonal conditions warrant. Stockpiles of processed and unprocessed shingle materials will be kept to a manageable height.

The onsite traffic patterns used by vehicles accessing the facility are intended to minimize vehicle roadway traffic in areas where products are stored or processed. In addition, the site is readily accessed by a number of major roadways to allow offsite vehicular traffic to avoid residential areas. Vehicles that utilize this site are not expected to use local residential area roadways, except when projects are generated from residential roof repair/development. The use of any roads in residential areas will be kept to a minimum. Trucks delivering materials or leaving the property with processed shingle materials will be covered with a tarp, or other suitable cover, to ensure that dust and debris will not blow off during transportation on roadways offsite.

The access roads to the site are paved. These roads may be cleaned or wetted as needed to minimize the amount of dust generated by trucks entering and exiting the facility. The site operator has access to adequate water supplies and appropriate equipment to allow the site personnel to wet down the piles of processed and unprocessed materials stored onsite. This measure can be employed to minimize the amount of dust that could blow off the piles when conditions warrant.



Due to the size and physical characteristics of the unprocessed material, it is anticipated the amount of the fugitive dusts generated from these stockpiles will be minimal. Prior to processing in the grinder, the material will be wetted with water to minimize the generation of dust during processing.

Stockpiles of processed materials will be wetted at the end of each day following the initial processing (unless weather conditions such as rain or snow provide a natural covering) to ensure that the outer layer of material is sufficiently wet to form an encrustation barrier over the stockpiles to limit potential fugitive dust. Additional wetting will be conducted during the course of the day if the facility believes that conditions exist where fugitive dusts emissions are potential.

### **2.6.2 Odor Control**

This asphalt shingle processing operation is not expected to create odors that would be a nuisance to surrounding properties. Should R&M discover that these operations are creating an odor problem, they will re-evaluate odor control practices and implement a plan that minimizes the issue. Asphalt shingles are not putrescible wastes and not expected to generate odors. All operations are at ambient temperatures.

### **2.6.3 Litter Control**

Good housekeeping practices throughout the site will keep litter to a minimum. Any litter will be immediately collected and placed in covered containers for ultimate disposal offsite at an approved disposal facility.

## **2.7 Health and Safety**

The site operations will be conducted in accordance with appropriate industry recognized health and safety practices as well as R&M's current policies and procedures. Additional details regarding required training and safety procedures are detailed in Section 7.0 of this General Operations Plan.

### **3.0 Facility Process Description**

#### **3.1 Facility Layout and Design**

The processed recycling facility is comprised of the following basic operating areas:

- The Unprocessed Material Storage Area, which is further segregated into an area for pre-consumers shingles (i.e., discards, cut-offs, etc.) and post-consumer shingles (i.e., used shingles from roof repairs/replacements, demolition activities, etc.);
- The Processing Area for sorting and/or grinding operations; and
- The Processed Material Storage Area, where finished products are staged prior to being sent offsite for reuse (the facility may use movable Jersey barriers to segregate the processed shingles area further to allow for the storage of processed materials from only pre-consumer shingles to meet the end use specifications, such a DelDOT requirements).

A site plan layout depicting these designated operating areas is included in this Plan as Attachment I. The Unprocessed Material Storage Areas is comprised of (approximately 195 feet by 60 feet) and is designed to hold approximately 8,000 tons (or approximately 16,000 cubic yards) of unprocessed shingles. Storage piles in this Area will be limited to a maximum height of 20 feet. This Area may also be used to store processed shingles to allow the facility to respond to changing end market conditions, particularly in winter months when asphalt plant production is reduced or interrupted. This Storage Area includes movable barrier walls (e.g., jersey barriers) used to segregated pre-consumer shingles from post-consumer shingles received by the facility. As materials are received, vehicles are directed to deposit their loads into the separate piles depending on whether they contain used (post-consumer) or unused (pre-consumer) shingles. For post-consumer shipments, R&M may segregate the incoming shingles into small receiving batches that will be stockpiled for subsequent sampling and analysis for asbestos testing by the facility, when appropriate (see Section 4.0 below).

The unprocessed post-consumer shingles are transferred to the facility's Processing Area, following confirmation that the shingles do not contain asbestos, where the shingles are hand-picked and sorted to remove any wood, metal or other non-processable materials that may be mixed with the shingles. The various non-shingle materials collected are stockpiled or placed into dumpsters for transfer to an appropriate offsite recycling/recovery or disposal facility.

Following this sorting step, the shingles are further processed, along with any pre-consumer shingles that do not require pre-sorting using a horizontal grinder to generate the final usable ground asphalt product. Depending on the requirements of the end product, the pre-consumer shingles may be processed separately to make a single post-processed material that is composed of only pre-consumer shingles (e.g., to meet a DelDot specification). Frequently, portions of the shingles may have to be re-processed through the grinder to ensure that the re-sizing of the material meets the reuse criteria.

Following processing, the ground shingles are stockpiled and placed in the Processed Material Storage Area (in piles no more than 20 feet high) at the facility until they can be sent offsite for reuse. The Processed Material Storage Area is located along the southern side of the facility. The area is approximately 87 feet long and 69 feet wide (as depicted in the facility Site Plan) and can store approximately 1,000 tons (approximately 1,500 cubic yards) of processed shingles. Again, this Processed Material Storage Area may be segregated using movable walls (e.g., Jersey barriers), that are used to separate end products that are comprised solely of processed pre-consumer shingles to meet an end use specification (e.g., a DelDOT standard). Processed shingles may also be stored in the unprocessed material storage as needed to adjust to market conditions. However, unprocessed shingles will not be stored in the Processed Material Storage Area.

## **3.2 Site Access and Traffic Management**

### **3.2.1 Operating Hours**

The processing facility will be open for receipt of recyclable materials from 7:00AM to 5:00PM Monday through Saturday. These represent the Daily Business Hours (i.e., hours open to the public). The facility will be open to process and handle materials within the bounds of the facility from 7:00AM to 7:00PM Monday through Saturday. These represent the Daily Operating Hours. This facility will be closed Sundays and holidays.

### **3.2.2 Site Security**

The site is secured from access by a chain link fence and physical barrier across the site. The entrance to the facility will be monitored by facility employees during Daily Business Hours and Daily Operating Hours.

### **3.2.3 Area Roadway and Truck Routing**

Materials will principally be delivered to the site by truck using New Castle Avenue.

### **3.2.4 Interior Traffic Procedures**

The entrance to the property is located along Heald Street. Signs will be posted as necessary to direct traffic to the facility location.

The facility entrance is approximately 100 feet from the entrance New Castle Avenue. This portion of driveway will provide adequate queuing for trucks delivering materials to the site. Trucks of varying size are expected to enter the facility throughout the day. Inbound trucks will be received at the facility and will be directed to unload in the Unprocessed Material Storage Area. Trucks entering the facility to pick up finished product will be directed to the Processed Material Storage Area. Trucks will enter and exit the site using the same access road.

## **3.3 Storage and Process Areas**

### **3.3.1 Pre-Acceptance**

Customers or contractors who wish to use the R&M facility for recycling of their own asphalt shingles must complete a Pre-Approval/Certification Form (See Attachment II) for each project that will be brought to the facility. For pre-consumer shingles, the supplier of the shingles, or his authorized representative, must certify that the shingles were not previously used in a consumer application, such as installed as roofing material, and that the shingles would not be classified as an Asbestos-Containing Waste Material (“ACWM”) as defined by U.S. EPA under 40 CFR Part 61, Subpart M (National Emission Standard for Asbestos). Customers or contractors wishing to recycle post-consumer shingles must select one of two options provided on the Pre-Approval Form to demonstrate that the materials are not classified as ACWM. The pre-approval procedures are further specified in Section 4.0 below.



### **3.3.2 Receiving Unprocessed Shingles**

Inbound shipments received at the facility are directed to the Unprocessed Material Storage Area for check-in and unloading. As outlined in Section 4.0 below, a Pre-Approval/Certification Form is completed and reviewed by R&M for each new customer/contractor project. Pre-Consumer shingles may be unloaded directly into the designated pre-consumer shingles section of the unprocessed material Storage Area for stockpiling before final processing. Post-Consumer shingles that have been tested prior to receipt may also be stockpiled directly in the designated post-consumer portion of the Unprocessed Material Storage Area. For post-consumer shingles that will be sampled by R&M for analysis, incoming shipments will be staged and stockpiled into 50 to 150 cubic yard piles in the post-consumer (used) shingles portion of the Unprocessed Material Storage Area to facilitate pre-acceptance sample collection as described in 4.2 below. Once these materials have been analyzed and confirmed as non-ACM shingles, the storage piles are consolidated as needed, however, pre-consumer shingles are not comingled with post-consumer shingles until just prior to processing (unless segregation to meet the end use specifications is required)

During unloading, the shipments will be visually inspected by R&M employees for any unacceptable materials as described in Section 4.3. Shipments of post-consumer shingles may also contain wood, nails, metal flashing, etc. that are associated with the removal/repair work that generated the shingles. The materials are removed during the pre-processing/sorting procedure as outline in 3.3.3 below.

### **3.3.3 Processing Areas**

Post-Consumer shingles are pre-processed before being placed through the grinder. Post-Consumer shingles are moved from the Unprocessed Material Storage Area to the Processing Area where operators can separate the materials to remove any wood, metal or other non-processable materials that may be mixed with the shingles. The various non-shingle materials collected are stockpiled or placed dumpsters for transfer to an appropriate recycling/recovery or disposal facility.

Following this pre-processing step, the sorted shingles are either placed back into the Unprocessed Material Storage Area or loaded into the grinder unit for final processing. Both pre-consumer and post-consumer shingles can be comingled during processing to generate the finished product (unless segregation to meet the end use specifications is required).

When sufficient quantities are available for processing, the sorted (pre-processed) stockpiles of post-consumer shingles, along with unprocessed pre-consumer shingles from the Unprocessed Material Storage Area, will be transferred into the infeed conveyor of the horizontal grinder unit (see Section 3.3.4 below) using a front-end loader, skid steer (Bobcat), or similar equipment, for final processing. The infeed conveyor to the grinder is 20 feet long by 6 feet 8 inches wide and moves the shingles through the multi-stage grinding process using heavy duty conveyor belts. A water spray system will be used during the grinding process to suppress any dust created during processing as needed.

Any processed shingle materials that do not meet the sizing requirements specified by the end user will be reprocessed through the grinder. Any unprocessable materials segregated during processing will again be placed into the onsite dumpsters in the Pre-Processing Area for proper management offsite. The final ground shingle product will be stockpiled in the Processed Material Storage Area until the materials are shipped offsite for reuse. The Processed Material Storage Area may also be segregated, as needed, using movable walls (e.g., Jersey barriers) to separate processed materials comprised of only pre-consumer shingles to meet an end use requirement (e.g., to meet a DELDOT specification).

### **3.3.4 Equipment**

Provided below is a list of the typical equipment that will be utilized at the asphalt shingle facility for site operations. The equipment specified here may be replaced or upgraded, as necessary, with similar or equivalent operation equipment to perform the functions required for the operations.

- Front-End Loader or skid steer(s) – equipment will be used to stockpile and move shingle materials throughout the facility.
- Horizontal Grinder – this equipment will be used periodically onsite for use to process the shingles. The unit can process up to 300 tons of

shingles an hour. A more detailed description of the grinder and specifications for the unit is provided in Attachment IV of this Operations Plan. Screening Equipment (Optional) – screens may be used for both pre-processing post-consumer shingles to remove non-processable materials and to screen and sort processed shingles to ensure that the material meets the end user specifications.

- Miscellaneous hand tools and equipment.  
Equipment will be properly maintained and inspected as discussed in Section 5.0 below.

### **3.3.5 Processed Material Storage Area**

Processed shingles will be stockpiled and staged in the Processed Material Storage Area. This storage location is approximately 150 feet long and 50 feet wide which runs along the south side of the facility and borders the operating area. Vehicles that are used to transport the processed shingle product offsite for reuse will access the facility using the main entranceway and stage near the stockpile where facility personnel can load the vehicle. This Storage Area has the capacity to store up to approximately 1,000 tons (or about 2,000 cubic yards) of processed shingle product. Storage piles with this Area will be limited to a maximum height of 20 feet. Since the reuse of the processed shingle product has some seasonal fluctuation in demand as asphalt plant feed stock and as roadway subbase material, the facility may also store processed shingles in the Unprocessed Material Storage Area as needed. This Area may also be segregated, as needed, using movable walls (e.g., Jersey barriers) to separate processed materials comprised of only pre-consumer shingles to meet an end use requirement (e.g., to meet a DeDOT specification).

## 4.0 Procedures for Pre-Qualification and Acceptance of Asphalt Shingles

### 4.1 Pre-Qualification/Approval Procedures for Shingles

All asphalt shingle materials to be processed at the R&M Recycling Facilities are qualified through a pre-approval review process prior to acceptance at the facility. The source of the asphalt shingles will either be pre-consumer or post-consumer asphalt shingles. No shingles containing asbestos will be accepted for recycling.

R&M will require customers or contractors to complete a Pre-Approval/Certification Form (see example of the form in Attachment II) for each new shingle project. This Form, when completed, will provide R&M with specific information on the shingle material and the source that generated it. For customers with pre-consumer shingles, only the pre-consumer portion of the Pre-Approval/Certification Form needs to be completed with the supplier information and certification. Pre-consumer (unused) shingles include cut-offs, tabs, and/or off-specification shingles received directly from a manufacturer or supplier. These are shingles that have not been previously used as roofing cover or roofing material for residential or commercial buildings and structures.

Post-consumer shingles, or used shingles (from roof repairs and replacements, structural demolition projects, etc.) may include incidental quantities of related roofing materials, including wood and wood products, roofing paper, nails, flashing and other metal materials. R&M will not accept Asbestos-Containing Material (ACM), fiber glass and other insulation materials, liquid materials (e.g., paints, oils, roofing tars, etc.), floor tiles, siding or other C&D materials not related to roof repair and/or replacement or related demolition activities. The customer or contractor that intends to bring post-consumer shingles to the facility must complete the bottom portion of the Pre-Acceptance Application Form, including the applicable certification for each new shingle project. Post-consumer shingles must also have appropriate documentation that shows the shingles are not ACM. There are two options that may be used to make this demonstration:

#### **Option 1: Sampling and Analysis is completed by the Supplier**

The supplier will sample and analyze the shingles prior to delivery to R&M using the procedures described in the facility's Sampling and Analysis Information Sheet ("SAIS") Form, included in Attachment II. The SAIS Form outlines the sample collection, testing frequency and laboratory requirements to properly complete the sampling. The supplier will then include the laboratory results with the Pre-Approval/Certification Form that is submitted to R&M for review.



**Option 2: Sampling and Analysis is completed by R&M**

R&M will sample and test incoming shipments of post-consumer shingles that arrive at its site for asbestos prior to acceptance (see Section 4.2 below). The supplier must still complete the Pre-Approval/Certification Form prior to R&M's acceptance of the material, however, R&M will issue a conditional approval number to the supplier/source indicating that final acceptance of the shingles is contingent upon the results of R&M's pre-acceptance sampling. The material will then be segregated and stockpiled in the Unprocessed Material Storage Area for testing as described below.

If the material is deemed acceptable using Option 1, and is consistent with the requirements of this GOP, R&M assigns an approval number to the load (e.g., R&M # 01032) that is unique to the customer/contractor and project. This number will be used to identify the shingles if additional materials from the same source or project are received at the facility. Any materials that will be qualified for acceptance using Option 2 will be assigned a conditional approval number (e.g., C-01034) which indicates that final acceptance is contingent upon the results of pre-acceptance sampling. For each shipment of shingles that arrives at the facility, a facility operator will complete Daily Receipt Log (see Attachment II) which will include the R&M approval code assigned to the shipment.

**4.2 Acceptance Procedures**

Sources of asphalt shingles, that have been reviewed and approved for the R&M facility using the pre-qualification procedures specified in Option 1 as outlined in Section 4.1 above, may be accepted by the facility for storage and processing. Once an approval number is issued for the shingles, any shingles from that same project and supplier may be accepted at the facility. For each shipment of shingles that arrives at the facility, a facility operator will complete Daily Receipt Log (see Attachment II) which will include the R&M approval code assigned to the shipment. Any post-consumer shingles that have been conditionally approved (i.e., they have been assigned a conditional approval number) using Option 2 must be sampled and tested by R&M prior to final acceptance. All samples will be collected by a State of Delaware Asbestos Field Technician employed by a Licensed State of Delaware Professional Service Firm. Incoming shipments of these post-consumer shingles that will be tested will be placed in small segregated stockpiles within the Unprocessed Material Storage Area for pre-acceptance testing. Each stockpile will be generally limited to approximately 50 cubic yards in size to facilitate the sample collection. Larger stockpiles may be used (not to exceed 150 cubic yards each); however, the sampling frequency will be increased as outline below. More than one supplier's

material (i.e., more than one conditional approval code) may be placed in the same pre-acceptance stockpile for sampling. However, the sample results obtained will only be used to qualify the stockpile sampled. Additional shipments from the same supplier must continue to be stockpiled and sampled as described below regardless of the results of the prior stockpile.

The following pre-acceptance sample collection and analysis procedures will be followed by R&M:

- 1) For stockpiles of asphalt shingles individual grab samples should be randomly collected from different locations of the pile. The individual grab samples may be combined into a composite sample (no more than 3 grabs per composite) for final analysis. The minimum number of samples required is as follows:

| <u>Stockpile Quantity</u> | <u>No. of Grabs/No. of Composites</u> |
|---------------------------|---------------------------------------|
| 0 – 50 cy                 | 6 grabs/2 composites                  |
| 51 – 100 cy               | 9 grabs/3composites                   |
| 101 – 150 cy              | 12 grabs/4composites                  |

- 2) When sampling a stockpile, grab samples should be collected from points of the pile with the greatest potential based on visual inspection, to contain ACM (i.e., materials of fibrous nature, material resembling or attached to ACM related material, etc.)
- 3) Other roofing materials, such as wood or metal waste, do not require additional testing for asbestos.
- 4) If any unexpected observations are noted during sampling (e.g., unusual stains, or odors, materials, etc.) the Facility Manager will be notified to determine if additional sampling is required or if the materials must be rejected.
- 5) Samples are to be analyzed using a polarized light microscopy (PLM) EPA test method 600/R-93-116, or equivalent method approved by the Agency. Testing should be completed by an accredited laboratory registered under National Voluntary Laboratory Accredited Laboratory Program, (NVLAP).

Upon receipt of the laboratory analysis, R&M will review the results to ensure that the materials received are not classified as ACM, as defined in 40 CFR Part 61 Subpart M. Any shingles that have been tested to show that the material is not ACM may be

comingled and mixed in the Unprocessed Material Storage Area to await further processing. If the laboratory analysis shows that the material is classified as ACM, the entire stockpile will be handled as ACM shingles. R&M will notify the Department and either arrange for proper disposal of the material or reject the material back to the original supplier. Upon the Department approval, R&M any conduct additional sampling of the stockpile to further segregate or separate out the ACM shingles. Again, any additional samples will be collected by a State of Delaware Asbestos Field Technician as specified above.

#### **4.3 Pre-Acceptance Inspections**

Inbound trucks are visually inspected by a facility operator to confirm that the contents are consistent with the pre-approval information and are acceptable to the facility. Shipments that have a high percentage (10% or greater by weight) of unprocessable materials, such as wood, metal, flashing, etc., which cannot be easily removed during the sorting/separation process may not accepted at the facility. In addition, any unacceptable materials identified during this inspection, i.e., Asbestos-Containing Material (ACM), fiber glass and other insulation materials, liquid materials (e.g., paints, oils, roofing tars, etc.), floor tiles, siding or other C&D materials not related to roof repair and/or replacement or related demolition activities, may either be segregated and rejected back to the supplier, in certain cases, the entire shipment may be rejected.

#### **4.4 Rejection Procedures**

If the visual inspection indicates that the vehicle's contents, or a portion of the contents, are not acceptable it will be directed to a holding area. R&M will subsequently contact the supplier and describe the reasoning for the rejection of the shipment, or any portion thereof. The vehicle's driver will be directed to return the rejected materials to the supplier for further action. Any rejected materials will be noted on the Daily Receipt Log.

### **5.0 Facility Inspection and Maintenance Procedures**

## **5.1 Inspection Procedures**

### **5.1.1 Daily Inspections**

R&M's asphalt shingle processing facility will be inspected on a daily basis. The facility Operator Manager or his designate will conduct a visual inspection of all relevant equipment and site operating areas. The inspection will be documented using the Facility Inspection Report included in Attachment II. The completed Facility Inspection Reports will be submitted to the Operations Manager who will maintain the reports onsite for a period of three (3) years.

### **5.1.2 Unsatisfactory Conditions**

Any unsatisfactory conditions found during the daily inspections will be identified and noted on the Facility Inspection Report form where indicated. If any conditions are identified that pose an immediate threat to human health or the environment, in any way, the Facility Operations Manager will take immediate actions to correct the conditions.

## **5.2 Facility Maintenance**

The facility procedures detailed throughout this GOP must be constantly evaluated and revised to ensure that the procedures that are in place are working efficiently and not creating adverse health and safety concerns or issues.

Should a maintenance issue arise regarding the grinding equipment, front end loaders and/or other operating equipment, the condition must be reported to the Operations Manager, or his designee, to determine whether immediate attention is required. A regular system of maintenance and inspections of facility equipment and components will be established based on manufacturer recommendations or good engineering practices to ensure that these elements remains operable and in good working order. The Operations Manager may order repairs and replacement of any facility equipment based on specific needs.

Repairs involving traffic management or security (i.e., signage, pot holes in the access road, holes in the fencing, etc.) must be repaired immediately.



Should a material hauler's vehicle break down while onsite, it will be the responsibility of the hauling company to repair their own equipment or dispatch an outside service company to R&M to repair the broken equipment. The R&M facility cannot assist in helping to repair outside material hauler's vehicles or equipment.

## **6.0 Facility Personnel and Training Requirements**

### **6.1 Facility Personnel**

Staffing at the R&M recycling facility consists of the Facility Operations Manager and several support personnel including equipment operators and general laborers. The Facility Operations Manager will be responsible for all facility operations; oversight of facility employees; ensuring compliance with applicable operating permits, regulations and the requirements specified in this GOP; completing the daily facility inspections; oversight of health and safety; scheduling of inbound/outbound loads; and acting as the primary coordinator during emergencies.

### **6.2 Personnel Training**

All recycling facility employees will have job specific training provided by R&M. In addition to job specific training, employees may be required to receive specific OSHA required training to comply with applicable federal standards. Facility personnel will receive both initial training and annual training, thereafter, in the following areas:

- Facility Procedures for Material Acceptance, Handling, Inspections and Recordkeeping;
- Contingency Plan and Emergency Response Procedures training;
- Use of General Health and Safety Procedures including, 1) Use of Personal Protective Equipment in accordance to 29 CFR 1910.132, 2) First Aid Awareness, 3) Fire Prevention, and 4) Equipment Operations (consistent with the manufacturer's recommendations).

In addition, R&M will designate "Competent Persons" who are required to visually inspect all incoming materials for the potential presence of ACM. These Competent Persons must be trained in accordance with the applicable requirements specified by OSHA, under 29 CFR 1926.1101(o) (4) (ii), or USEPA under 40 CFR 763.92(a) (2).

## **7.0 Contingency Plan and Emergency Response Procedures**

On a day to day basis, facility employees should always be on alert for potential emergency situations that could affect, or have the potential to affect, human health and the environment. The emergency response and contingency procedures that must be implemented in the event of a fire, spill or explosion at the facility are outlined in the facility's Contingency Plan. A copy of the Contingency Plan is provided as Attachment III.

## **8.0 Recordkeeping Procedures**

### **8.1 Facility Operating Records**

Copies of the following records and forms will be returned by the Facility Operations Manager to document compliance with the operating requirements specified in the GOP.

- Completed Pre-Approval/Certification Forms and related documents (sample results provided by suppliers, documentation of shingle source information/age, etc.);
- Records of any sampling or testing completed of incoming post-consumer shingles by R&M;
- Daily Receipt Logs for incoming shipments;
- Records of shipments of the finished products to end users.

### **8.2 Inspection Documents**

Periodic facility inspections are documented immediately after the inspection using the Facility Inspection Report, as described in Section 5.0 above. Copies of the Facility Inspection Report Form must be maintained onsite by the Facility Operations Manager.

### **8.3 Incident Reports**

Incidents requiring emergency response actions or initiation of the facility's Contingency Plan are documented using an Incident Report Form (a sample is included in Attachment II) immediately following the incident. Copies of the Incident Report Form are maintained by the Facility Operations Manager. A typical Incident Report Form will include: time/date, inspector's name, type of incident, description of the incident, details on the release (if applicable), corrective action implemented, notifications made including feedback from the notified agencies, detailed information on the injured person (if applicable), etc.

### **8.4 Reporting to the State of Delaware**

#### **8.4.1 Quarterly Reports**

Quarterly reports will be submitted in electronic format, or as prescribed by the Department. The first Quarterly reports will be due 15 days after the end of the calendar quarter (i.e., April 15<sup>th</sup>, July 15<sup>th</sup>, October 15<sup>th</sup> and January 15<sup>th</sup>).



- The amount of shingles accepted at the site for the quarter.
- The amount of shingles processed for the quarter.
- The amount of unprocessed shingles stored onsite at the end of the quarter.
- The amount of shingles stored onsite at the end of the quarter.
- A list of any shipments rejected and the purpose for rejection.
- A list of any sampling done by R&M when ACM was found and when the ACM was disposed.

#### **8.4.2 Annual Reports**

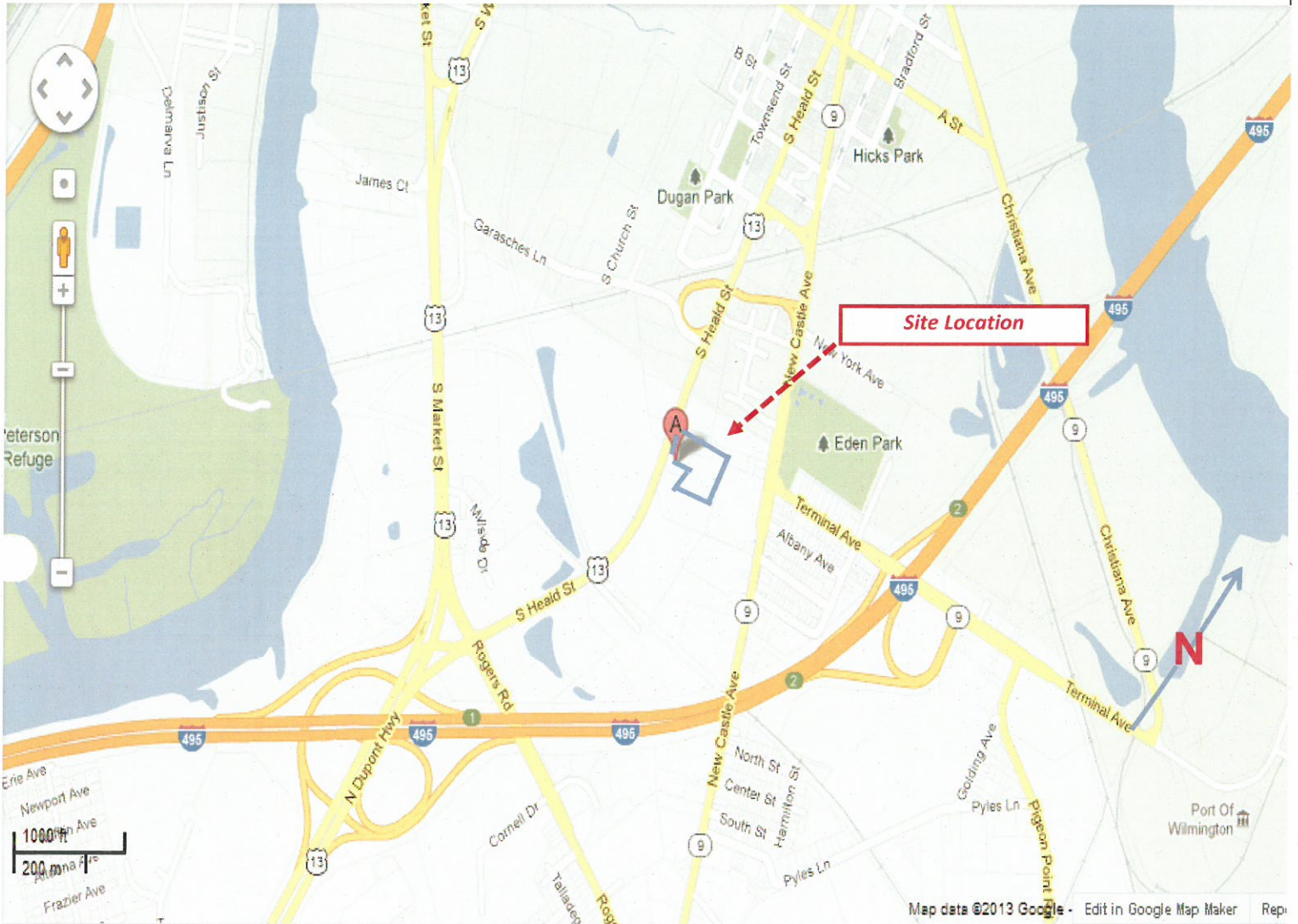
Annual Reports will be submitted in hard copy (paper) format. The annual report will consist of a summary of all the information included in the quarterly reports. Annual reports will be due no later than February 1<sup>st</sup> of each calendar year. In addition, R&M must submit an updated closure cost estimate that has been adjusted for inflation. Any increase in closure cost will require the submission of a new financial assurance within six (6) weeks of filing the adjusted closure costs. The annual report shall be sent to the following address:

Department of Natural Resources and Environmental Control  
Division of Air and Waste Management  
Solid and Hazardous Waste Management Branch  
89 Kings Hwy  
Dover, DE 19901

*Attachment I*

*Site Plans and Drawings*

**SITE LOCATION MAP**  
**R&M Recycling, LLC**  
**924 Heald Street**  
**Wilmington, Delaware 19801**



Source of Aerial: Microsoft Streets & Trips

|  |                          |                                  |
|--|--------------------------|----------------------------------|
| <b>SITE LOCATION MAP</b><br>R&M Recycling, LLC<br>924 Heald Street<br>Wilmington, Delaware 19801 | Scale: None              |                                  |
|  | Project No. 0309.0312.01 | Project Name: R&M Recycling, LLC |



**AERIAL LOCATION MAP**  
**R&M Recycling, LLC**  
**924 Heald Street**  
**Wilmington, Delaware 19801**



**AERIAL LOCATION MAP**  
*R&M Recycling, LLC*  
*924 Heald Street*  
*Wilmington, Delaware 19801*

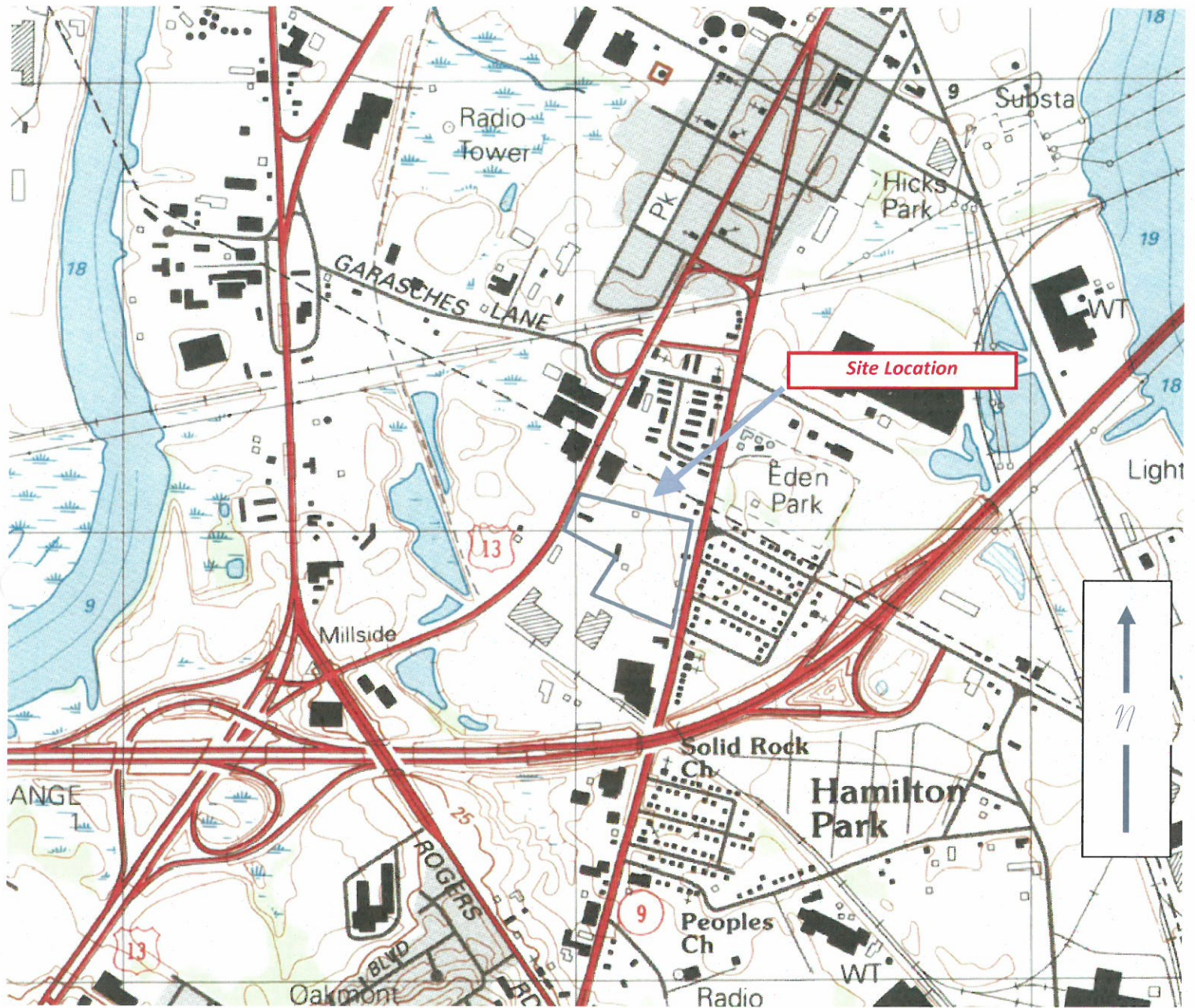
Scale: None

Project No. 0309.0312.01

Project Name: R&M Recycling, LLC



**TOPOGRAPHIC MAP**  
**R&M Recycling, LLC**  
**924 Heald Street**  
**Wilmington, Delaware 19801**



Map Source: <http://topomaps.usgs.gov/>

**TOPOGRAPHIC MAP**

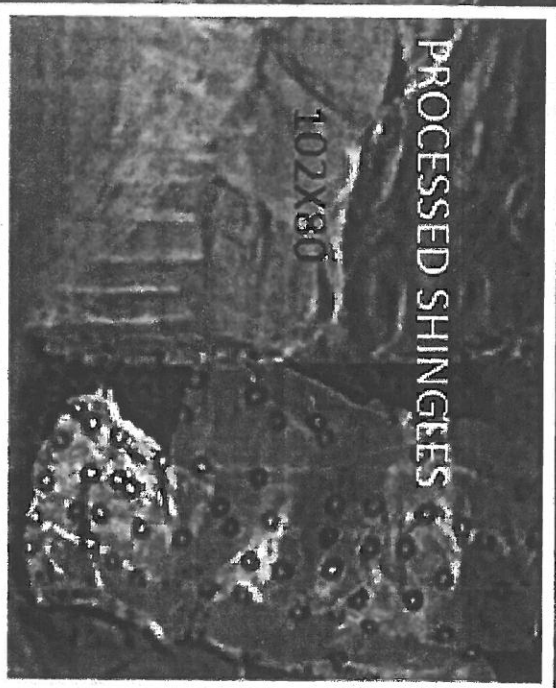
R&M Recycling, LLC  
924 Heald Street  
Wilmington, Delaware 19801

Scale: None

Project No. 0309.0312.01

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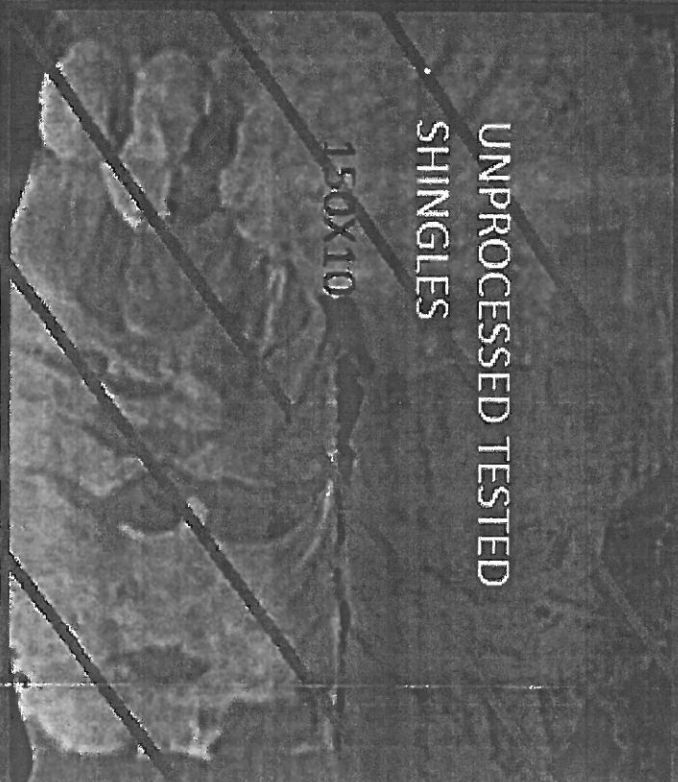




PROCESSED SHINGEEAS

102X80

GRINDER



UNPROCESSED TESTED SHINGLES

150X10

SHINGLE HOLDING AREA  
AWAITING TESTING

27X25



© 2015 Google



1991

Imagery Date: 10/7/2011

39°43'20.02" N 75°32'47.3

elev 10 ft

Google

## *Conversion Ratios*

## CONVERSION RATIOS

### UNPROCESSED MATERIALS

| MATERIAL                              | TONS : CUBIC YARDS  | CUBIC YARDS : TONS |
|---------------------------------------|---------------------|--------------------|
| ASPHALT, CONCRETE,<br>BRICK AND BLOCK | 1 TON = 0.83 CY     | 1 CY = 1.2 TONS    |
| ASPHALT BASED<br>ROOFING SCRAP        | 1 TON = 2 CY        | 1 CY = 0.5 TONS    |
| STUMPS/LOGS                           | 1 TON = 4 CY        | 1 CY = 0.25 TONS   |
| BRUSH                                 | 1 TON = 8 CY        | 1 CY = 0.125 TONS  |
| WOOD PALLETS                          | 1 TON = 7 CY        | 1 CY = 0.143 TONS  |
| WOOD (OTHER)                          | 1 TON = 5.5 CY      | 1 CY = 0.182 TONS  |
| SOIL                                  | 1 TON = .769 CY     | 1 CY = 1.3 TONS    |
| CAR TIRES                             | 1 TON = 10 CY       | 1 CY = 0.1 TONS    |
| CAR TIRES                             | 1 TON = 100 TIRES   | 1 TIRE = 20 LBS.   |
| TRUCK TIRES                           | 1 TON = 22.22 TIRES | 1 TIRE = 90 LBS.   |
| LEAVES COMPACTED                      | 1 TON = 2 CY        | 1 CY = 0.5 TONS    |
| LEAVES UNCOMPACTED                    | 1 TON = 5 CY        | 1 CY = 0.2 TONS    |
| LEAVES VACUUMED                       | 1 TON = 2.86 CY     | 1 CY = 0.35 TONS   |
| LEAVES BAGGED                         | 1 BAG = 15 LBS.     |                    |
| GRASS COMPACTED                       | 1 TON = 1.8 CY      | 1 CY = 0.556 TONS  |
| GRASS UNCOMPACTED                     | 1 TON = 2.7 CY      | 1 CY = 0.37 TONS   |

### PROCESSED MATERIALS

| MATERIAL                       | TONS : CUBIC YARDS | CUBIC YARDS : TONS |
|--------------------------------|--------------------|--------------------|
| CRUSHED CONCRETE               | 1 TON = 0.667 CY   | 1 CY = 1.5 TONS    |
| ROOT MULCH<br>(STUMPS) [MOIST] | 1 TON = 2.5 CY     | 1 CY = 0.4 TONS    |
| HARDWOOD MULCH<br>(TREE PARTS) | 1 TON = 3 CY       | 1 CY = 0.333 TONS  |
| WOOD CHIPS                     | 1 TON = 4 CY       | 1 CY = 0.25 TONS   |
| WOOD CHIPS<br>(PALLETS) [DRY]  | 1 TON = 6.5 CY     | 1 CY = 0.154 TONS  |

# *Storage Volume Calculations*

# *Storage Volume Calculations*

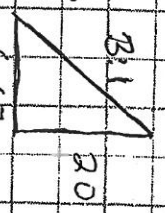


R&M Recycling, LLC

Storage Capacity = Volume - Slope Factor

Assumptions:

- Max Height = 20 ft
- Max Slope = 3:1
- Slope Factor = 66.7 CF/LE



$\frac{1}{2} (20)(66.7) = 66.7 \text{ CF/LE}$

$VOL_{\text{Processed Material Stockpile}} = VOL_{\text{area}} - \text{Slope Factor}$

$= (SE \text{ of Footprint} \times \text{Height}) - (66.7 \times \text{Perimeter})$

$= [(87' \times 40' + \frac{1}{2}(87' \times 24')) \times 20] - [66.7 \times (87 + 69 + 91 + 40)]$

$= [(4741.5) \times (20)] - [(66.7) \times (287)]$

$94830 - 19142.9$

$= 75,687.1 \text{ CF}$

$= 2803.23 \text{ CY}$

$2803.23 \text{ CY} \times \frac{100}{2 \text{ CY}} = 401.62 \text{ TONS} > 1000 \text{ TONS}$

There is sufficient room in this area to store the maximum permitted amount of 1,000 tons of processed material

VOL Unprocessed Material = Vol area - Slope Factor  
Awaiting Testings

$$= (SF \text{ of Footprint} \times \text{Height}) - (66.7 \times \text{Perimeter})$$

For 35ft Height

$$\text{VOL} = (4222 \times 35) - (66.7 \times 283)$$

$$= (147770 - 18876) \text{ CF} = 4774 \text{ CY}$$

$$= 2387 \text{ TONS}$$

NOTES: AREA OF FOOTPRINT AND PERIMETER MEASUREMENT BASED ON CAD PROGRAM MEASUREMENT OF AERIAL SCALE MAP

① Assume 2 CY OF MATERIAL = 1 TON

$$VOL_{\text{Tested Unprocessed Material}} = Vol_{\text{area}} - Slope Factor$$

$$= (SF \text{ of Footprint} \times \text{Height}) - (66.7 \times \text{Perimeter})$$

For 35ft Height

$$VOL = [(10046 \times 35) - (66.7 \times 4169)] \text{ CF}$$

$$= (351610 - 27882) \text{ CF} = 11864 \text{ cy}$$

$$= 5932 \text{ TONS}$$

NOTES: (1) AREA OF FOOTPRINT AND PERIMETER MEASUREMENTS BASED ON CAD PROGRAM MEASUREMENTS OF AREAL SCALE MAP

(2) Assume 2 cy of MATERIAL = 1 TON

(2387 + 5932) TONS = 8319 TONS > 8000 TONS

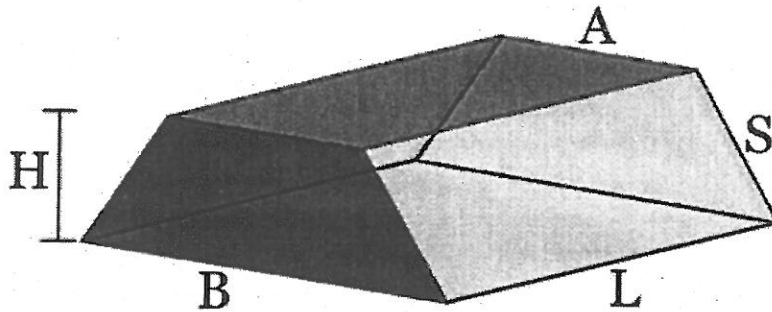
THAT IS SUFFICIENT ROOM IN THE TWO UNPROCESSED WASTE STORAGE AREAS TO STORE THE MAXIMUM PERMITTED AMOUNT OF 8000 TONS

|                                  |                               |                       |
|----------------------------------|-------------------------------|-----------------------|
| Prepared By: GRADILEY CONSULTING | PROJECT: R & M Recycling, LLC | Tested Unprocessed in |
| Compliance Plus Services, Inc.   | REVISION:                     | Volume Calculation    |
|                                  | DATE: March 2013              |                       |



# Volume of a Trapezoidal Prism: Formula and Examples

Updated on February 5, 2015



In geometry, a trapezoidal prism is a solid shape that has trapezium (trapezoid) cross-sections in one direction and rectangular cross-sections in the other directions. When computing the volume of a symmetric trapezoidal prism, you need to know four measurements: the length of the prism ( $L$ ), the height of the trapezoidal cross-section ( $H$ ), the base width of the trapezoid ( $B$ ), and the top width of the trapezoid ( $A$ ).

Alternatively, if you know the trapezoid's slant side lengths ( $S$ ), you can compute the volume with  $L$ ,  $S$ ,  $B$ , and  $A$ .

Both formulas for the volume of a trapezoidal pyramid are given below along with several example problems. See also, Surface Area Formula for a Trapezoidal Prism.

## Formula for Volume of a Trapezoidal Prism

If the prism length is  $L$ , trapezoid base width  $B$ , trapezoid top width  $A$ , and trapezoid height  $H$ , then the volume of the prism is given by the four-variable formula

$$V(L, B, A, H) = LH(A+B)/2.$$

In other words, multiply together the length, height, and average of  $A$  and  $B$ . This formula is equivalent to multiplying the length of the prism by the area of the trapezoidal cross-sections. If you don't know  $H$ , but instead know the slant side length  $S$ , the formula is a bit more complicated. It's

$$V(L, B, A, S) = L(A+B)\sqrt{4S^2 + 2AB - B^2 - A^2}/4.$$

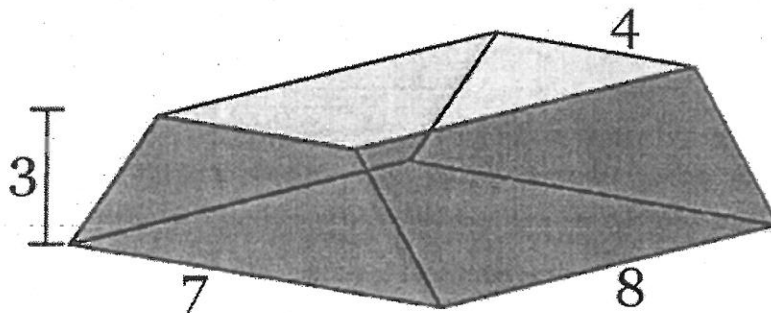
This second formula is derived from the fact that

$$\begin{aligned} H &= \sqrt{S^2 - ((B-A)/2)^2} \\ &= \sqrt{4S^2 + 2AB - B^2 - A^2}/2. \end{aligned}$$

Here are some example problems to help you work out prism volumes. In the formulas above and examples below, it is assumed that the trapeziums are symmetric, that is, the slant side lengths are equal on both sides; the center of the top length is vertically aligned with the center of the base length.

### Example 1

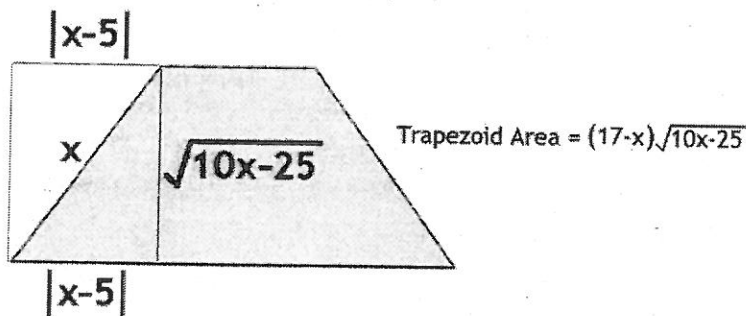
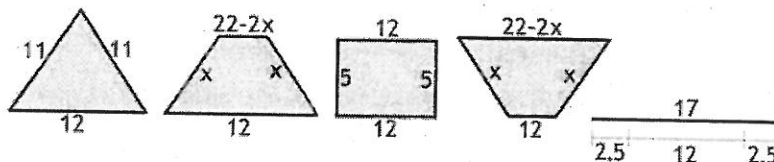
A trapezoidal prism has a length of 8, base width of 7, top width of 4, and height of 3.



A box in the shape of a trapezoidal prism is to be made, subject to the following three conditions: the length of the prism box is 24 cm, one of the parallel sides of the trapezoid face has a length of 12 cm, and the whole perimeter of the trapezoidal face is 34 cm. What shape should the trapezium be so that the volume of the box is maximized?

To begin, we should note that this is essentially a problem in maximizing the area of the trapezoid since the lengths of all the possible trapezoidal prisms will be equal to 24 cm.

To create the equations we need to solve, let  $x$  equal the length of each slant side and  $34 - 12 - x - x = 22 - 2x$  be the length of the other parallel side. Below are the possible trapezoid shapes that fit the constraints of the problem; the triangle and flat line are the limiting cases.



Regardless of the shape of the trapezoid, its height can be found by applying the Pythagorean Theorem to the right triangle formed on the trapezoid's side. Simplifying the expression

$$h^2 + |x-5|^2 = x^2$$

gives us  $h = \sqrt{10x-25}$ . See figure above. Since the area of a trapezoid is  $1/2$  times height times the sum of the two parallel side lengths, we have

$$\text{Area} = (1/2) \cdot \sqrt{10x-25} \cdot (34-2x) = (17-x) \cdot \sqrt{10x-25}.$$

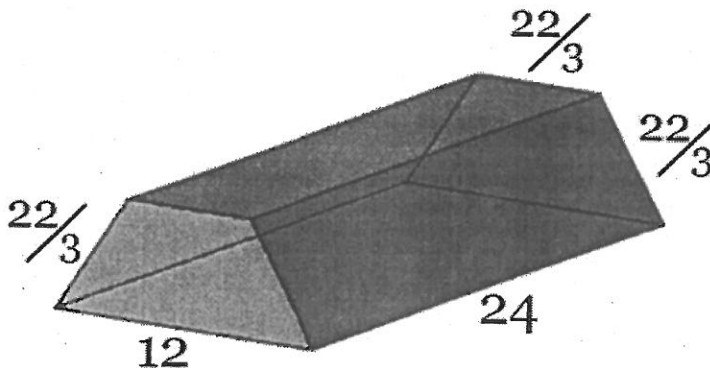
since the sum of the two parallel sides is the perimeter (34) minus the sum of the two slant sides ( $2x$ ). To maximize the area, we take the derivative of the function, set it equal to zero, and solve for  $x$ . Using the product rule, the derivative is

$$[(17-x) \cdot \sqrt{10x-25}]' = (110x-15) / \sqrt{10x-25}$$

This derivative equals 0 when  $x = 110/15 = 22/3$ , or about 7.33333. Plugging this value into the area function gives us a maximum trapezoidal area of

$$(17 - 22/3) \cdot \sqrt{220/3 - 25} = (29/3) \cdot \sqrt{145/3} \approx 67.20477 \text{ cm}^2$$

The maximum volume of the trapezoidal prism is then  $24 \cdot (29/3) \cdot \sqrt{145/3} \approx 1612.91455 \text{ cm}^3$ . The solution prism is shown below.





*Attachment II*

*Operation Forms and Records*

R&M Recycling, LLC  
 Asphalt Shingles Processing Facility  
 FACILITY INSPECTION REPORT

INSPECTOR: \_\_\_\_\_

DATE: \_\_\_\_\_

SITE CONTACT: \_\_\_\_\_

TIME: \_\_\_\_\_

WEATHER CONDITIONS: \_\_\_\_\_

| INSPECTION ITEM  | ACCEPTABLE |    | OBSERVATIONS/COMMENTS |
|--|------------|----|-----------------------|
|  | YES        | NO |                       |
| <u>Storage Location:</u> All processed and unprocessed material must be properly stored in the locations designated on the approved Facility Site Plan. (Ensure facility boundary lines are maintained). |            |    |                       |
| <u>Management Controls:</u> Are all proper management controls in place at the facility, including appropriate fugitive dust control measures?   |            |    |                       |
| <u>Housekeeping:</u> All facility processing and storage areas are free of debris, trash, etc.   |            |    |                       |
| <u>Roadways/Access ways:</u> All interior roadways and access roads at the facility must be maintained to ensure that equipment and vehicles may be efficiently moved in the event of an emergency.      |            |    |                       |
| <u>Storage Pile Height:</u> Storage piles must not exceed a maximum height of 20 feet  |            |    |                       |
| <b>INSPECTION OF STORM WATER MANAGEMENT CONTROL</b>  |            |    |                       |
| <u>Storm Drains and Drainage Ditches:</u> All storm water drains, diversion/drainage ditches of other conveyance systems must be properly maintained and clear of debris or excess sediment build-up.    |            |    |                       |
| <u>Spills and/or Leaks:</u> Storage and processing areas must be inspected to ensure that there are no visible signs of spills or leaks.   |            |    |                       |
| <b>GENERAL SITE SAFETY AND SECURITY</b>  |            |    |                       |
| <u>Fencing/Barriers:</u> All site fencing and property barriers must be properly maintained and in place in accordance with the approved site plan.  |            |    |                       |

**FACILITY INSPECTION REPORT**

| INSPECTION ITEM  | ACCEPTABLE |    | OBSERVATIONS/COMMENTS |
|--|------------|----|-----------------------|
|  | YES        | NO |                       |
| <u>Personal Protective Equipment:</u> All personnel working in designated process or storage areas of the Facility must wear appropriate personal protective equipment at all times. This may include hard hats, safety glasses, gloves, ear protection and steel toes safety shoes (hard hats are not required for personnel who are in equipment that provides overhead protection). |            |    |                       |
| <u>Housekeeping (non storage/ non process areas):</u> General housekeeping conditions in non storage/non process areas of the facility (receiving area, equipment staging areas etc.) Should be kept neat and orderly and clear of excess debris or obstructions which could create hazardous conditions.  |            |    |                       |
| <u>Signs and Postings:</u> All required signs and postings should be clearly visible and properly maintained. This includes the company identification signs posted at the entrance to the facility as well as any safety warning/ directional signs that are posted for the operations, maintenance areas and traffic movements.  |            |    |                       |

Additional Comments/Observations:

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Recommendations:

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Inspected by:

---

Print name

---

Signature

---

Date

*Incident Report Form*

**R&M Recycling, LLC - Asphalt Shingles Processing Facility  
Incident Report Form**

**Date of Incident:** \_\_\_\_\_ **Time of Incident:** \_\_\_\_\_ a.m. p.m.

**Name of Person Completing Report:** \_\_\_\_\_

**Type of Incident:**

Fire     Explosion     Spill or Release     Personal Injury

Other: \_\_\_\_\_

**Description of Incident:** (Brief description - Attach detailed written reports by personnel and witnesses to this form)

Description:

**Quantity Spilled or Released:**

**Description of actions taken:**

**Notifications Made:** (Contingency Plan and Emergency Response Procedures)

911 For Fire or Police Dept.

DNREC – For Spills or Releases

24 Hour Hotline: 1-800-662-8802, 1-302-739-9401, and  
#367 for Verizon Wireless customers

National Response Center 1-800-424-8802

Incident Case #:

Contact Name:

Date/Time of Notification:

Notes:

**Personnel Injuries:**

Name of Injured Person:

Age

Address:

Job Title

Home Phone:

Male  Female

Was First Aid Given?  No  Yes

Medical Care Necessary  No  Yes

Name of Hospital or Acute Care Facility;

Address of Hospital or Acute Care Facility:

Work Time Lost?  No  Yes

Number of Days Away:

Other Information:

Signature of Injured Person:

Date:

Signature of Person Completing Report:

Date:



*Pre-Approval Form*

# Pre-Approval/Certification Form

## R&M Recycling, LLC – Asphalt Shingles Recycling Facility

**Customer Information**

Billing Name: \_\_\_\_\_  
 Billing Address: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 Telephone No: \_\_\_\_\_ (Office)  
 \_\_\_\_\_ (Cell)  
 \_\_\_\_\_ (Fax)

For R&M Recycling Use Only

Reviewed by: \_\_\_\_\_ (Initials)  
 Approval No.: \_\_\_\_\_  
 Comments/Notes: \_\_\_\_\_  
 \_\_\_\_\_

**Pre-Consumer Shingles**

Pre-Consumer shingles are tabs, cut-offs, and/or off-specification singles received directly from the manufacturer or authorized supplier that have never been used in any post-consumer application.

Supplier Name: \_\_\_\_\_ Complete if different from the Generator  
 Supplier Address: \_\_\_\_\_  
 Description of Supplier Process: \_\_\_\_\_

Manufacturer Name: \_\_\_\_\_  
 Mfg. Address: \_\_\_\_\_

Certification: I hereby certify that the materials were not previously used as roofing material, or in any post-consumer application, and that the material will not be classified as an asbestos-containing waste material (ACWM) as defined by U.S. EPA under 40 CFR Part 61 Subpart M (National Emission Standard for Asbestos).

Supplier Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Post-Consumer Shingles**

All Post-Consumer shingles must be sampled and analyzed for asbestos in accordance with the procedures specified in R&M Recycling, LLC's Asphalt Shingles *Sampling and Analysis Information Sheet (SAIS)*.

Supplier Site/Owner: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Is the Property: (check one)  
 Residential  
 Commercial  
 Industrial

***Asbestos Certification (\*Required for Post-Consumer Shingles, chose option below):***

**OPTION 1:** Sampling & Analysis completed by Supplier/Contractor

Amount of shingles removed  <1,000 sq. ft.  1,000 to 5,000 sq. ft. or  more than 5,000 sq. ft.

Were asbestos samples collected as per the SAIS Form  Yes  No

How many composite samples were collected and analyzed - \_\_\_\_\_ (specify)

Results of analysis attached  yes  no (also attached appropriate sample chain-of-custody forms)

**OPTION 2:** Sampling & Analysis to be completed by R&M Recycling.

I hereby authorize R&M Recycling to conduct the sampling/analysis as outlined in the SAIS Form on my behalf.  Yes  No

Certification: I certify the information included in this Pre-Approval Application Form is true and accurate. I further certify that, if Option 1 was selected, representative samples were collected by a qualified and trained individual and analyzed of the Post-Consumer shingles referenced above in accordance with R&M Recycling's Asphalt Shingles SAIS Form, and based on the results obtained, the asphalt shingles are not classified as asbestos-containing waste material as defined in 40 CFR Part 61 Subpart M. In the event the asphalt shingles are determined, based on analysis conducted at the R&M Recycling Facility, that the material is classified as asbestos-containing waste, I understand that the generator/contractor identified here will be responsible for reimbursing R&M Recycling for any additional disposal and testing costs incurred.

Supplier/Contractor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

*Asphalt Shingles Material Daily*

*Receipt Log Form*



*Sampling and Analysis Information Sheet*



## Sampling and Analysis Information Sheet R&M Recycling Asphalt Shingle Recycling Center

Asbestos was widely used in home and commercial construction through the mid-1970s. One of the most commonly known uses for asbestos materials was in roofing shingles or tiles. A home was built or renovated anytime before the 1980s may have roofing shingles that could be asbestos roofing shingles. Since that time, most manufacturers have sought out alternative materials for roofing and asbestos roofing shingles are extremely uncommon in newer buildings.

While roofs made with asbestos or transite roofing shingles were commonly called "asbestos roofs," the truth is that most contain less than 30 percent asbestos fibers. They are classified as "asbestos containing materials," or ACM. Transite, the most common type of asbestos roofing tiles, was made with Portland cement and asbestos fibers, often with other fibers and materials added. For additional information concerning the proper handling and disposal of asbestos-containing shingles contact the U.S. Environmental Protection Agency (EPA) or the Delaware Department of Natural Resources and Environmental Control (DNREC).

### Requirements For Acceptance:

R&M Recycling only accepts asphalt shingles (both pre-consumer and post-consumer) for recycling at its facility. Post-consumer shingles (e.g., from roof replacement) may include incidental quantities of related roofing materials, including wood and wood products, roofing paper, nails, flashing and other metal materials. R&M Recycling cannot accept Asbestos-Containing Material (ACM), fiber glass and other insulation materials, liquid materials (e.g., paints, oils, roofing tars, etc.), floor tiles, siding or other C&D materials not related to roof repair and/or replacement or related demolition activities. Post-consumer shingles must have documentation that shows the shingles are not ACM. There are two options that may be used to make this demonstration:

#### Option 1: Sampling and Analysis is completed by the Generator/Contractor

Sample collection should only be performed by a qualified and trained individual consistent with applicable requirements specified by the State of Delaware. These instructions are only intended to provide guidance for the number of samples required to be collected.

#### Option 2: Sampling and Analysis is completed by R&M Recycling

R&M Recycling will sample and test any post-consumer shingles that arrive at its site for asbestos upon request. Generator/Contractor must still complete the Pre-Approval/Certification Form prior to R&M Recycling's acceptance of the material.

### Sample Collection:

For individual roof repair/removal or demolition projects:

|   |   |   |
|---|---|---|
| Project Area < 1,000 sq. ft.                  | - | Collect a minimum of 3 individual samples and combine into one (1) composite sample for analysis    |
| Project Area between 1,000 and 5,000 sq. ft.  | - | Collect a minimum 6 individual samples and combine into two (2) composite samples for analysis      |
| Project Area between 5,000 and 10,000 sq. ft. | - | Collect a minimum of 9 individual samples and combine into three (3) composite samples for analysis |

For stockpiles of asphalt shingles individual grab samples should be randomly collected from different locations of the pile. The individual grab samples may be combined into a composite sample (no more than 3 grabs per composite) for final analysis. The minimum number of samples required is as follows:

| <u>Stockpile Quantity</u> | <u>No. of Grabs/No. of Composites</u> |
|---------------------------|---------------------------------------|
| 0 - 50 cy                 | 6 grabs/2 composites                  |
| 51 - 100 cy               | 9 grabs/3 composites                  |
| 101 - 150 cy              | 12 grabs/4 composites                 |

(For each additional 50 cy of shingles collected an additional 3 grabs/1 composite sample)

Additional Instructions:

- 1) When sampling a single roof removal/demolition project, composite only homogeneous areas together (i.e., areas uniform in color and texture). Additional composites may be required to ensure all areas are sampled.
- 2) For removal/demolition project with areas greater than 10,000 sq.ft. or stockpiles greater than 300 cubic yards may be eligible for reduced sampling frequency, please contact R&M Recycling for assistance.
- 3.) When sampling a stockpile, grab samples should be collected from points of the pile with the greatest potential based on visual inspection, to contain ACM (i.e., materials of fibrous nature, material resembling or attached to ACM related material, etc.).
- 4.) Other roofing materials, such as wood or metal waste, do not require additional testing for asbestos.
- 5.) If any unexpected observations are noted during sampling, (e.g., unusual stains, or odors, materials, etc.) please contact R&M Recycling for further assistance.

Analysis:

Samples are to be analyzed using a polarized light microscopy (PLM) EPA test method 600/R-93-116, or an equivalent method approved by the State of Delaware or U.S. EPA. Testing should be completed by an accredited laboratory registered under National Voluntary Laboratory Accredited Laboratory Program, (NVLAP) (<http://ts.nist.gov/Standards/scopes/plmtm.htm>). A few examples of accredited testing laboratories are provided below.

Asbestos Analytical Laboratories:

**Criterion Labs**

Bensalem, PA  
(215) 244-1300 x 26  
Contact: Mike Panepresso

**EMSL Analytical, Inc.**

Westmont, NJ  
(856) 858-4800  
Contact: Gary Perlmutter

**Environmental Testing, Inc.**

Middletown, DE  
(302) 378-9881  
Contact: LeeAnn Shinaberry

Please contact any one of these laboratories for additional sampling instructions, proper bottleware for sample collection, sample transportation equipment and required custody paperwork.

*N:\#0309 - R & M Recycling, LLC\Name Change Forms\Drafts\Operations Plan Attachments\Attachment 2 - Operating Forms and Records\Sampling and Analysis Information Sheet Revised August 22, 2012.wpd*

*Facility Inspection Report Form*

*Attachment III*

*Contingency Plan and Emergency  
Response Procedures*

---

# **Contingency Plan and Emergency Response Procedures**

**R&M Recycling, LLC Asphalt Shingles Recycling  
Facility**

**R&M Recycling, LLC  
924 Heald Street  
Wilmington, DE 19801**

**Prepared by:  
Compliance Plus Services, Inc.**

P.O. Box 186  
Hatboro, PA 19040-0186  
(215) 734-1414  
(215) 734-1424 (fax)

Project Number: 0309.0312.01



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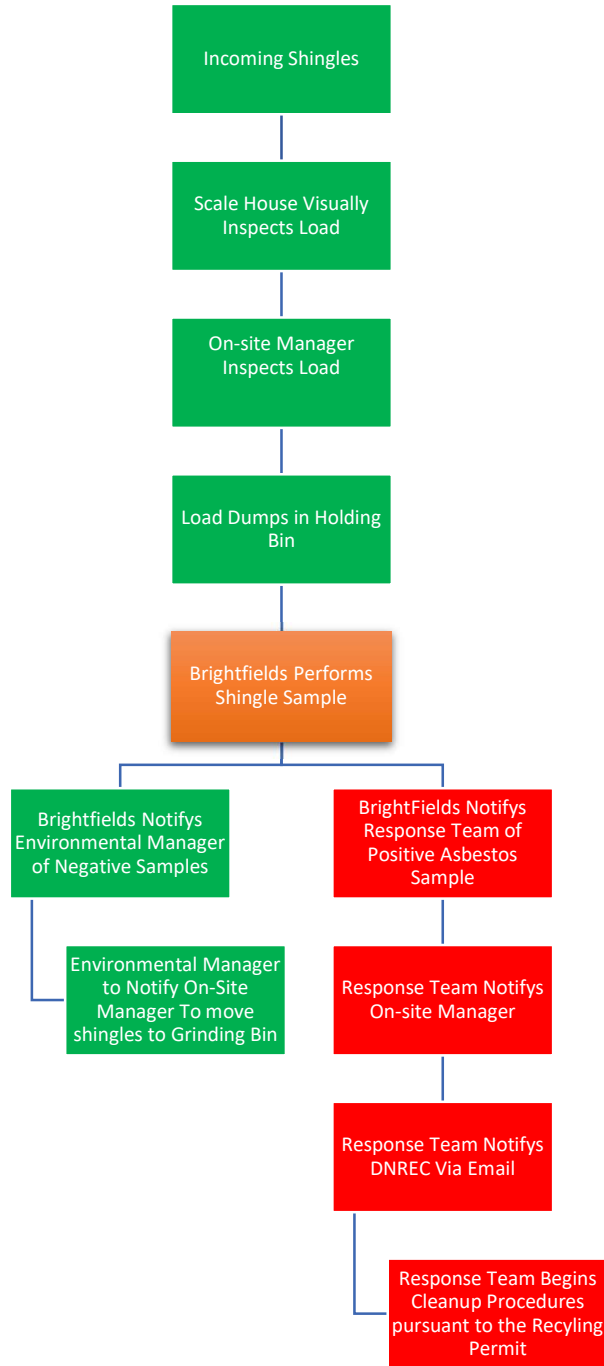
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|            |  |
|------------|--|
| Table 1    | Classes of Fire Extinguishers                      |
| Table 2    | List of Emergency Response Coordinators            |
| Table 3    | List of Agencies                                   |
| Appendix I | Evacuation Plan and Fire Extinguisher Location Map |

On-site Manager - Justin Mozuliski  
Environmental Manager – Lenny Morris

Response Team:  
Lenny Morris  
Todd Lester  
Mike Handy  
Paul H. Lester



## 1.0 Procedures to Prevent Spills, Releases, Fires and Other Emergencies

On a day-to-day basis, personnel working at the R&M Recycling, LLC ("R&M") Recycling Facility should always be on alert for potential emergency situations that would impact not only themselves, but other employees as well.

An **On-Site Emergency** is defined as any event that requires immediate action to be taken as the result of an uncontrolled, unexpected or unscheduled event. Events include, but are not limited to: serious injuries, fires, explosions, material spills, toxic material release including gases or fumes, loss of site power system, equipment breakdown, flood or threat of floods or any other force or factor which may adversely affect operations or safety at this Asphalt Shingles Processing Facility.

A **Site Wide Emergency** is any On-Site Emergency that affects or has the potential to affect personnel or the environment outside of the normal work zones, and/or may require activation of the site evacuation procedure (see Section 2.1 of this Plan).

### **1.1 Spills Or Releases**

In a spill or release situation it is critical that R&M prevent the escape of any spilled liquid or solid material into the ground, surface water body (i.e. river or stream), or a storm or sanitary sewer system. A barrier must be erected immediately to prevent escape of spilled materials. Containment of solids will be dependent on such factors as wind and other weather related conditions. The use of a tarpaulin or plastic sheeting over the spilled material will aid in preventing dispersal of solid material until such time as it can be cleaned up. Liquids must be contained by using absorbent booms, pads, or an effective adsorbent such as vermiculite or Speedi-dry.

The source of the spill or release must be located and controlled as soon as possible. Once the spill or release is located, R&M will immediately contain the spill by the use of a berm, pigs or other absorbent materials, so as to prevent it from reaching any surface water body. Once the source of the spill, or release, has been identified, clean up can begin.

Materials spilled on impervious surfaces should be absorbed with a compatible inert material such as Speedi-dry or vermiculite. If the spill or release is on soil or any other pervious

surface, the contaminated area must be excavated and contained in bags, drums, or roll-off boxes.

All spill clean-up material collected must be properly marked and appropriately managed.

## **1.2 Fires And Explosions**

R&M has established procedures to be used in the case of a small fire. If the fire is determined to be beyond the capability of facility employees, this R&M Contingency Plan and Emergency Response Procedures must be activated. R&M employees should always call 911 in the case of a fire or explosion emergency.

In the case of a fire or explosion, report the fire **immediately** to the Fire Department before attempting to extinguish the fire by yourself. Remember, if the fire or explosion is beyond the capability of facility employees; **DO NOT ATTEMPT TO PUT OUT THE FIRE! LEAVE IT TO THE PROFESSIONALS.** Be prepared to give the following information to the Fire Department upon placing the notification phone call:

- Your exact location including address of the R&M facility
- Type of fire, if known, (i.e. wood, petroleum, grease, electrical, etc.)
- Your name, telephone number, number of injuries, if known
- Stay on the phone until the Fire Department tells you to hang up
- Make sure to evacuate all personnel from the area. If the fire is electrical in nature and you can cut the power to the area without harm to anyone, (i.e. de-energize the circuit.)

### **1.2.1 Before Operating a Fire Extinguisher**

- Examine for defects.
- Read the operating instructions on the label.
- Make location of extinguisher known. Refer to the R&M-Asphalt Shingles Recycling Facility-Evacuation Plan and Fire Extinguisher Location Map for details on the location of all on-site fire extinguishers.
- Fire extinguishers are easily distinguished throughout the facility by their distinctive bright colored covers.

### 1.2.2 Follow These Steps To Operate an Extinguisher:

- Remove from the mounting bracket by grasping the unit by the carrying handle and the base then carry it to the fire.
- Pull the locking pin to break the tamper seal. If the unit has a hose, remove the hose from its retaining clip.
- Move the extinguisher as close to the fire as possible. Grasp the hose in one hand and press or squeeze the handle or trigger release with the other. (If the unit is a CO<sub>2</sub> extinguisher, grasping the plastic discharge horn may freeze the hand.) If the unit has no hose, direct the stream of extinguishing agent by moving the extinguisher.
- Use a side to side sweeping motion at the base of the flames starting from the near edge to the rear of the fire and then up the vertical surface.
- Always ensure you have an escape route when fighting a fire.

### 1.2.3 Inspection and Maintenance of a Fire Extinguisher

Inspect units monthly to ensure good working condition and adequate protection. The units must be free of rust, punctures, corrosion or other damage. If possible, the fire extinguishers should be housed inside a case to protect them from the environmental elements. The fire extinguishers should also be rotated in order to keep the chemical from caking. A state certified fire extinguisher inspection contractor must inspect these units on an annual basis.

#### Inspection Procedure:

- Are all extinguishers in their recommended location?
- Are there enough units onsite compared to the size of the operations and number of employees at the facility?
- Is the unit fully charged?
- Is there enough pressure to discharge the contents of the extinguisher? (check the gauge)
- Replace or recharge the unit as needed.
- Is the tamper seal intact?
- Does the unit carry a current inspection tag?
- Is the unit damaged?
- Is the hose and nozzle unobstructed?



#### **1.2.4 Selecting the Proper Fire Extinguisher**

The universal classification system has four designations for fire extinguishers; class A, B, C, and D, based on the size of a fire to be extinguished and the contained extinguishing agent. A 20B rating is recommended for non-expert users. Combination extinguishers are suitable for more than one class of fire and are marked with the symbols for the classes they cover, e.g., ABC extinguishers, or BC extinguishers. See Table 1 for a summary of the classes of fire extinguishers.

#### **1.2.5 Fire Prevention**

The following rules should be followed in order to prevent fires:

- Keep all work areas clean and free of debris and litter.
- Smoking is strictly forbidden in any part of the Recycling Facility.
- All potential fire hazards should be reported immediately to the Facility Manager.
- All electrical connections and wiring will be maintained adequately and in good condition.
- No flammable liquids will be used to clean the facility.
- Equipment and vehicle refueling must be supervised at all times.
- There are to be no open flames onsite.
- Any cutting and welding will be supervised completed and performed under a Hot Work Permit.

### **1.3 Flood Events**

The R&M facility is located within the Special Flood Hazard Area subject to inundation by the 1% Annual Chance Flood Event (100 year flood).

The national standard for floodplain management is the base or 1% chance floodplain. This is the floodplain that has at least one chance in 100 of being flooded in any given year. It is also called the 100 year floodplain. "100 year flood" is a statistical term that refers to the odds of a flood that size happening in any given year. It is possible to have 100 year floods two years in a row.

Normally, the area where the R&M facility site is located is not susceptible to flash flooding; any flood event would be the result of a major storm such as a hurricane/tropical storm or snowstorm melting. This major weather event would be forecast in advance giving R&M facility personnel time to relocate certain equipment and/or materials to other areas onsite above the Base Flood Elevation. This would include front end loaders, dumpsters, grinders, interior facility vehicles, street sweeper/water truck, based on decisions made by site supervisory personnel.

Site personnel will also inspect (prior to the onset of the flood event, if possible) the moveable barriers which are positioned on the lower elevation sides of the material storage piles. The purpose of these barriers are not to prevent the flood waters from moving into the storage areas but rather to contain any uplifted materials from being moved outside the perimeter of the barriers by the flood waters. The height of the barriers will be such that the top of the barriers are above Base Flood Elevation. Depending on the amount(s) of materials in the storage piles, the hydraulic up light of the flood waters may uplift some the materials but the jersey barriers/concrete push walls will retain the materials with the designated storage areas.

## 2.0 Notification and Emergency Procedures

In the event of an emergency including fire, explosion, spill or release of fuels/solid/ liquid material or waste at the Recycling Facility, it will be the responsibility of R&M to implement the following R&M Contingency Plan and Emergency Response Procedures.

The first employee witnessing and responding to an incident involving an emergency/ spill/ release will contact R&M's Primary Emergency Response Coordinator (i.e. Facility Manager) or the Alternate Coordinator (i.e. Facility Manager's designate), if the Primary Coordinator is not available. The Emergency Response Coordinator will notify all employees that an emergency is in progress.

See Table 2 for a listing of the Primary and Alternate Coordinators and their direct telephone numbers at the facility:

The Primary or Alternate Emergency Response Coordinator will activate the emergency procedures as outlined in this Contingency Plan and Emergency Response Procedure, and make the appropriate notifications to all Federal, State, or Local agencies as required.

See Table 3 for a listing of the agencies to be contacted in the case of an emergency, or release or spill of a material waste at the Recycling Facility:

If an emergency situation occurs, R&M's Contingency Plan and Emergency Response Procedures will be placed into effect and followed. R&M will furnish the following information to all agencies when notified:

- Name of person reporting the emergency
- Name, telephone number and address of R&M:
  - R&M Recycling, LLC
  - 924 Heald Street
  - Wilmington, Delaware 19801
  - 302-658-6524
- Date, time and location of the incident
- Type of vehicle or container involved in incident
- A brief description of the incident (What, when, where, etc.)
- Was material was spilled or released, if so what type?
- Amount spilled or released?
- Did a fire or explosion occur?

- Was material containment achieved?
- Description of injuries, if applicable

For any material spilled or released the following information is necessary:

- Name of person reporting the release
- Name, telephone number and address of R&M:  
R&M Recycling, LLC  
924 Heald Street  
Wilmington, Delaware 19801  
302-658-6524
- Date, time and location of the release
- A brief description of the incident (What, when, where, etc.)
- Name, address and phone number of the Generator or Supplier
- Name of material spilled or released
- Estimated quantity of the spill or release
- Extent of spill/release

R&M will log each incident into a logbook and an incident number will be assigned to each entry that will serve as a unique identifier for future reference regarding the incident.

## **2.1 Emergency Evacuation**

The purpose of an Evacuation Procedure is to detail a course of action to be taken by all employees, contractors, and/or visitors that are on site during a site wide emergency.

### **2.1.1 The Primary Emergency Coordinator or his/her Alternate will:**

Determine if, and when, a site evacuation is to be carried out. The Primary Emergency Coordinator or his/her Alternate will be required to be kept up to date on the personnel accountability from the facility.

### **2.1.2 Notification:**

In the case of an evacuation order, employees will be notified verbally as the Recycling facility is relatively small and the employees work in relatively close proximity.

**2.1.2.1 Site Visitors:**

Site visitors will be the responsibility of the R&M representative with whom visitors are meeting.

**2.1.2.2 Evacuation Route:**

For the evacuation route and the off-site rally point, see the Evacuation Plan and Fire Extinguisher Map (Appendix 1). This Map will be posted conspicuously at the facility. Once at the rally point, a head count will be taken and reported to the Primary Emergency Coordinator. If it is established that facility employees or visitors are unaccounted for, then emergency responders must be informed. No rescue efforts are to be attempted by any facility employee.

**2.1.2.3 Training**

All employees are trained on this Emergency Response Plan and the emergency evacuation routes in order to insure that all employees are familiar with and respond to all aspects of the evacuation procedure.



### 3.0 Emergency Equipment

The following emergency equipment may be placed at strategic locations throughout the Recycling Facility in order to respond to minor emergencies that facility employees are capable of safely containing. The following list is for suggested equipment and supplies. Note: the actual emergency response equipment maintained at the facility may vary from this list:

- Fire Extinguishers
- Absorbent Pads, booms, blankets, Speedi-dry, etc.
- Personal Protective Clothing (e.g., coveralls, safety glasses, etc.)
- Other Emergency Response Equipment
  - Salvage drum
  - Shovels and other hand tools
  - Caution Tape
  - Flashlights
  - First Aid Kit
  - Plastic Sheeting

All emergency equipment should be maintained as necessary to assure its proper operation at the time of an emergency. After use, all equipment is decontaminated, cleaned and determined fit and placed back into service.

## **4.0 Post-Emergency Evaluation And Return To Regular Operations**

Before normal activities can be resumed, R&M must be ready and equipped to handle another emergency. R&M will ensure that all emergency equipment and supplies have been restocked and will replace any equipment that might have been damaged during the previous emergency. All equipment will be cleaned and refueled for future use.

R&M will review and revise this Contingency Plan and Emergency Response Procedures in light of new site conditions and lessons learned from an emergency response.

## TABLES

| <b>Table 1: CLASSES OF FIRE EXTINGISHERS</b> |                |                       |
|--|----------------|-----------------------|
| <b>Class</b>                                 | <b>Symbol</b>  | <b>Type of Fuel</b>   |
| A  | Green Triangle | Ordinary Combustibles |
| B  | Red Square     | Flammable Liquids     |
| C  | Blue Circle    | Electrical Equipment  |
| D  | Yellow Star    | Combustibles metals   |

| <b>TABLE 2: LIST OF EMERGENCY RESPONSE COORDINATORS</b> |              |                         |
|---|--------------|-------------------------|
| <b>Coordinator</b>                                      | <b>Name</b>  | <b>Telephone Number</b> |
| Primary Coordinator                                     | Paul Lester  | (302)420-5826           |
| Secondary Coordinator                                   | Lenny Morris | (302)420-1340           |

| <b>TABLE 3: LIST OF AGENCIES</b>  |  |
|---|--|
| <b>Agency</b>   | <b>Telephone Number</b>                            |
| Local Emergency Agency<br>(Fire, Police, Ambulance)   | 911  |
| State of Delaware-DNREC- Compliance and Permitting Section  | (302) 739-9403                                     |
| State Of Delaware - Department of Natural Resouces and Environmental Control  | 24 Hour Emergency Response Line:<br>1-800-662-8802 |
| Environmental Control - Division of Waste and Hazardous Substances  | Accidental Release Program: 302-395-2520           |
| State Of Delaware - Department of Natural Resouces and Environmental Control - Division of Waste and Hazardous Substances | Emergency Prevention and Response:<br>302-739-9404 |
| National Response Center*   | 1-800-424-8802                                     |

\* The National Response Center(NRC) must be notified if a release at the facility is at or above its reportable quantity(RQ) or is if the release is a threat to or reaches a waterway. Review 49 Cfr 171.15 for additional notification procedures.

N:\#0309 - R & M Recycling, LLC\BUD Application for S. Heald Street Address Changes\Operations Plan and Attachments\Contingency Plan and Emergency Response Procedures Revised March 2021.docx

*Appendix I*

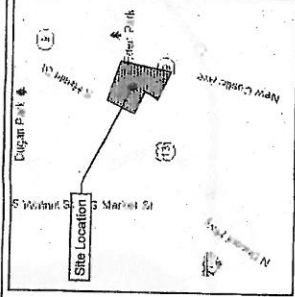
*Evacuation Plan and Fire Extinguisher  
Location Map*



**R&M RECYCLING, LLC**  
**ASPHALT SHINGLE RECYCLING FACILITY - SITE PLAN**  
 924 South Heald Street  
 Wilmington, DE 19801  
 Drawing No: 1 Revision No: 0 Date: 03/08/2013

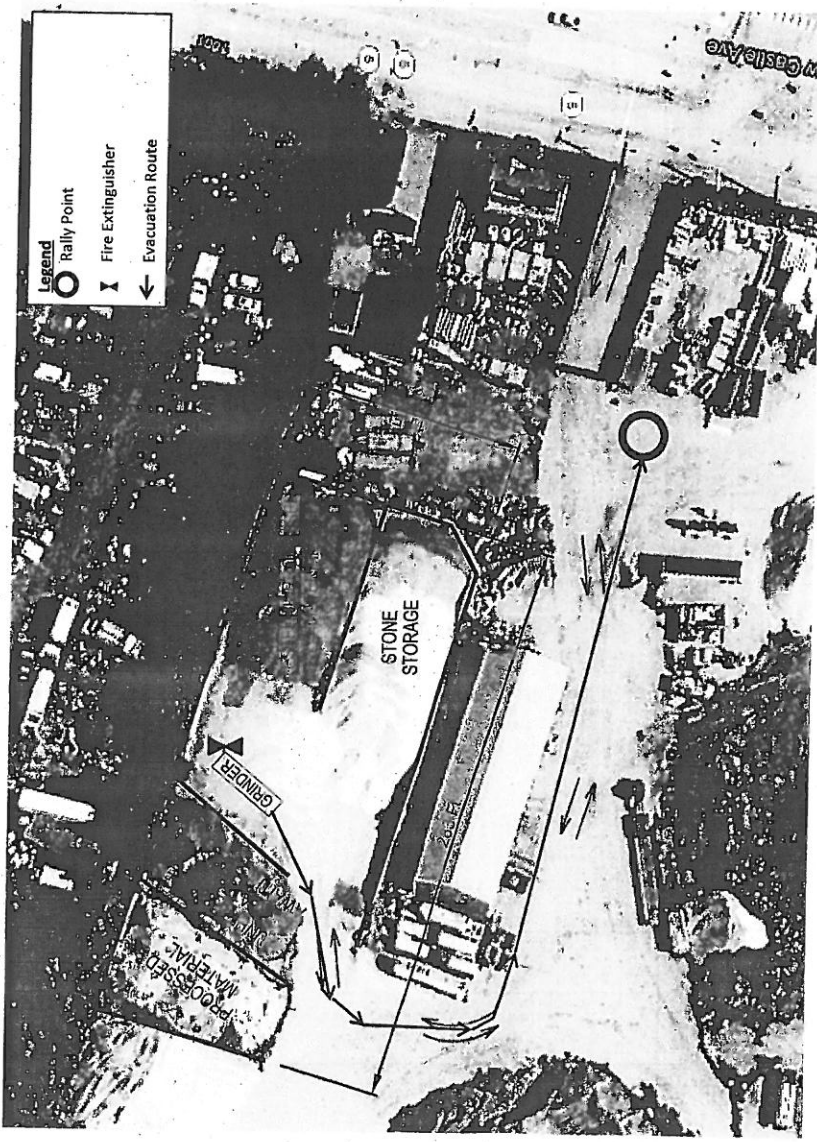
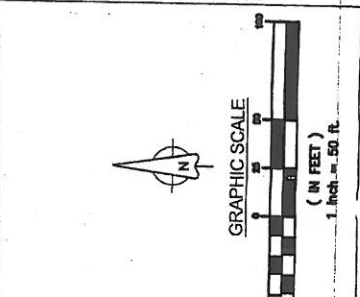
**COMPLIANCE PLUS SERVICES, INC.**  
 P.O. BOX 186  
 HATBORO, PA 19040  
 PHONE (215) 734-1414 FAX (215) 734-1424  
 WWW.CPS-ZCOMPY.COM

Project: 309-01  
 Scale: 1" = 50'  
 Drawn By: Becky Cunningham, P.E.  
 Check By: Rick Orndel



**LEGEND:**  
 ———— Indicates Traffic Flow  
 ————> Traffic Flow

**NOTES:**  
 ① Grinder is portable and may be positioned anywhere on the site as needed.  
 ② Processed shingles may be stored in the unprocessed area if necessary to meet market conditions.  
 ③ Storage areas are for asphalt shingles.  
 ④ Storage pile heights will be a maximum of 20 feet.  
 ⑤ Movable barricades will be used in the unprocessed area to segregate incoming materials prior to onsite testing.  
 ⑥ Pre-consumer shingles will be kept segregated from post-consumer shingles until the materials are processed.  
 ⑦ Fire extinguishers are located on Grinder.

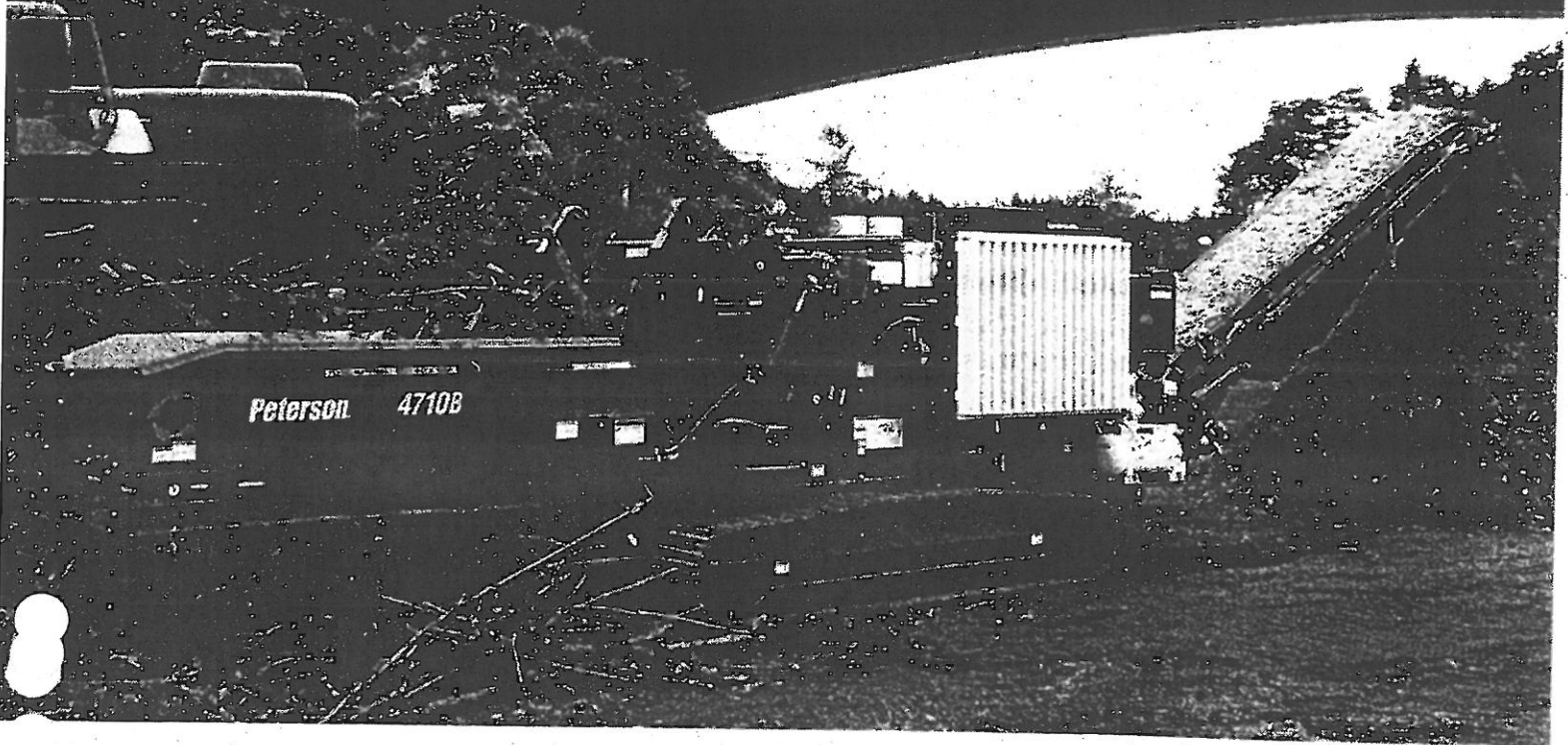


**Legend**  
 ○ Rally Point  
 X Fire Extinguisher  
 ← Evacuation Route

*Attachment IV*

*Peterson 4710 Horizontal Grinder  
Equipment Information*

# 4710B Grinder



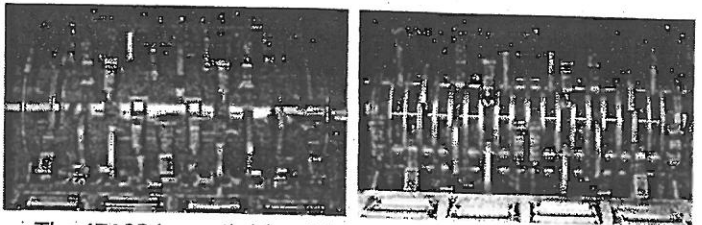
The Peterson 4710B horizontal grinder is a track mounted version of the popular 4700B trailer mounted horizontal grinder. It is powered by a Caterpillar C18 rated at 765 horsepower (570 kW). The 4710B has 18 inches (45.7 cm) of ground clearance making this model ideal for land clearing operations or other applications where frequent moves are required.

The 4710B features Peterson's Adaptive Control System, which controls all components of the feed system to optimize output. This system senses variations in the engine load and adapts the operating parameters to produce the maximum amount of material at all times.

Peterson's three-stage grinding process with an up-turning rotor and large grate area enables the 4710B to produce materials to exact specifications. Quick-change multiple grate system makes it easy to customize grate configurations to produce a wide variety of finished materials. Grates are removed through an access door on the side wall.

Unique to Peterson horizontal grinders is our innovative latching Impact Release System, which minimizes damage from contaminant in the feed material. The anvil and first grate open upon a severe impact, allowing contaminant to be ejected, and then re-latch to permit continuous grinding.

Rotor options include a "drum" style rotor for compost/mulch and forestry applications, and a "pinned" style for higher impact or contaminated applications such as construction & demolition (C&D).

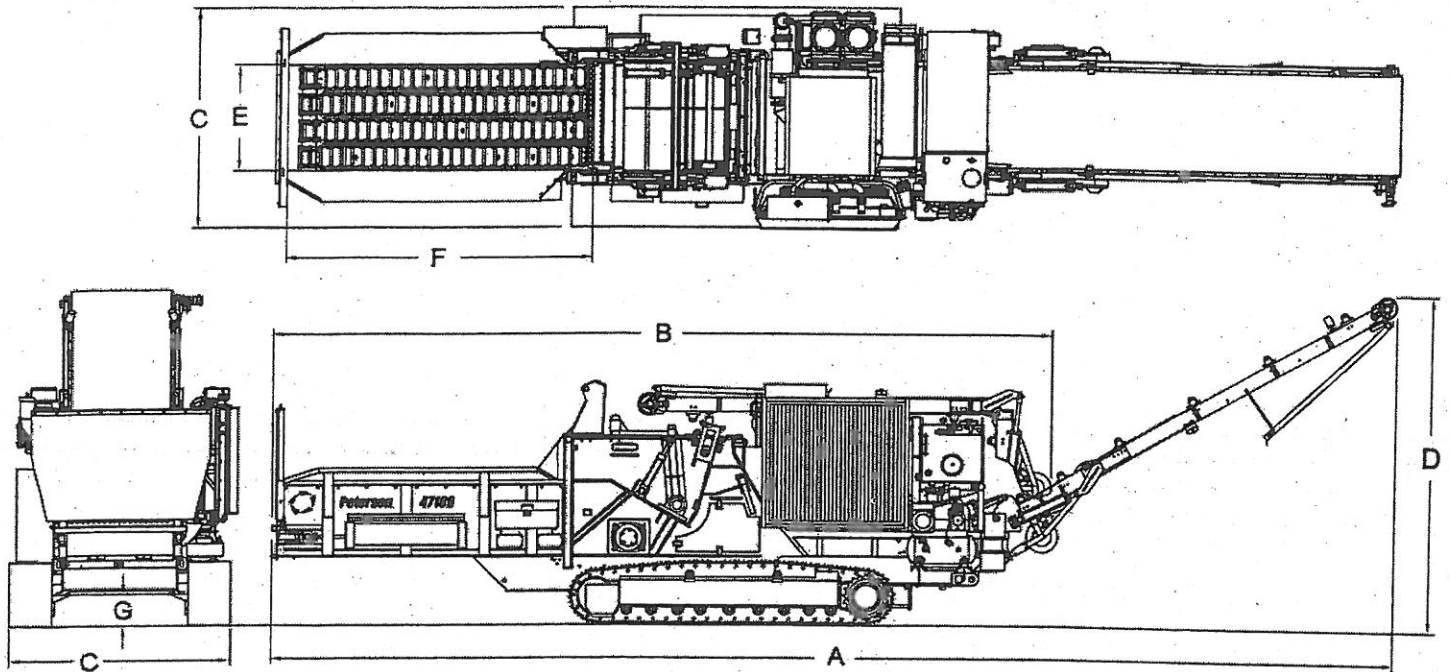


*The 4710B is available with either a drum or pinned rotor*

Peterson specializes in developing delivery and processing equipment that turns low-grade organic materials into high value products.

**Peterson**

# 4710B Horizontal Grinder Specifications



## Dimensions

|                    |   |
|--------------------|---|
| A—Operating Length | 52'-6¼" (1601 cm)   |
| B—Travel Length    | 36'-2¼" (1103 cm)   |
| C—Width            | 10'-9" (328 cm)   |
| D—Discharge Height | 15'-9¾" (482 cm)  |
| E—Hopper Width     | 60" (152 cm)  |
| F—Hopper Length    | 14'-2" (432 cm)   |
| G—Ground Clearance | 18" (45.7 cm)   |
| Travel Height      | 11'-6" (351 cm)   |
| Weight             | 74,000 to 79,000 lbs (33 566 to 33 834 kg) depending on configuration |

## Tracks

|                  |                                     |
|------------------|-------------------------------------|
| Ground Clearance | 18" (45.7 cm)                       |
| Track Type       | Triple Grouser, 23 ½" (60 cm) wide  |
| Travel Speed     | 0.8 5/ 1.6 mph (1.4 / 2.6 kph)      |
| Ground Pressure  | 11.0 lbs/in <sup>2</sup> (75.8 kPa) |

## Powertrain

|                              |                                  |
|------------------------------|----------------------------------|
| Engine                       | Caterpillar C18                  |
| Horsepower                   | 765 hp (570 kW) @ 2100 rpm       |
| Clutch                       | Twin Disc wet disc clutch HP610S |
| Fuel Tank Capacity           | 300 U.S. gal (1136 L)            |
| Main Hydraulic Tank Capacity | 95 U.S. gal (360 L)              |

## Feed System

|  |   |
|--|---|
| Total Hopper Capacity                  | 7.4 yd <sup>3</sup> (5.7 m <sup>3</sup> ) |
| Drag Chain Size                        | WDH110                                    |
| Hopper Loading Height                  | 7'-4¾" (225 cm)                           |
| Feed Opening (width x height)          | 60 x 37½" (152 x 95 cm)                   |
| Compression Roll Diameter (tip to tip) | 33½" (85 cm)                              |

## Rotor

|                           |                                |
|---------------------------|--------------------------------|
| Rotor Width               | 63½" (161 cm)                  |
| Rotor Speed               | 1050 rpm @ 2100 rpm (engine)   |
| Rotor Diameter            | 38" (96.5 cm)                  |
| Number of Bits            | 22 drum rotor, 20 pinned rotor |
| Bit Size (width x height) | 2¾ x 5" (7 x 12.7 cm)          |

## Grate Data

|                          |   |
|--------------------------|---|
| Number of Grate Sections | 4   |
| Total Grate Area         | 4023 in <sup>2</sup> (25955 cm <sup>2</sup> ) |
| Rotor Coverage           | 187 degrees                                   |
| Grate Thickness          | 1" (2.54 cm) or 1¼" (3.12 cm)                 |

## Discharge System

|                                       |                           |
|---------------------------------------|---------------------------|
| Discharge Conveyor Width              | 54" (137 cm)              |
| Conveyor Speed                        | 450 ft/min (137.20 m/min) |
| Discharge Height (top of head pulley) | 15'-9¾" (482 cm)          |

## Optional Equipment

Air Compressor  
Magnetic Pulley  
Grate Hangers

## Production

|             |   |
|-------------|---|
| Greenwaste  | 360 yd <sup>3</sup> /95 US tons (275 m <sup>3</sup> /86 metric tons) per hour |
| Scrap Board | 425 yd <sup>3</sup> /65 US tons (325 m <sup>3</sup> /59 metric tons) per hour |

*(Actual output may vary due to moisture content, material density, material size, support equipment, and grate size. Production rates are based on grinding 50 minutes per hour.)*

*Specifications subject to change without notice*



Scan with your smartphone  
to see a video of the 4710B

## Exhibit 5

*Evidence that the Product Use Will Not  
Adversely Affect Human Health and the  
Environment*



**R&M Recycling, LLC ("R&M")**  
**Beneficial Use Determination for Asphalt Shingles Processing**  
**Exhibit 5-**  
**Evidence that the Product Use Will Not Adversely Affect Human Health and the Environment.**

The proposed facility will be accepting only non-asbestos containing asphalt shingles that processed and ground into an asphalt milling type product that can be either used as feed material at hot or cold mix asphalt plants or as subbase material for roadway construction. The facility has an extensive evaluation program proposed to ensure that incoming materials are sampled and tested, or properly demonstrated to show that the unprocessed shingles do not contain levels of asbestos that would classify the material as asbestos-containing material pursuant to the standards provided under the U.S. EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements under 40 CFR Part 61 Subpart M.

As indicated in the attached sample material safety data sheet (MSDS) for typical unprocessed asphalt shingle material that will be accepted by the facility, the only hazardous ingredient in the material is the asphalt itself. The polymerized asphalt has been historically shown to be environmentally inert and is in use throughout the country in hundreds of thousands of miles of existing roadways. The processed or ground shingles will not add any new hazardous ingredients to the final product that is produced by the facility. Further, the final product is simply replacing existing feedstock materials, such as asphalt millings, or crushed aggregate or millings for use road subbase that are chemically and physically similar to the recycled product produced.

Consequently, we believe the use of this recycled product will not adversely affect human health or the environment.

Sample Material Safety Data Sheet  
For Asphalt Shingles



BUILDING PRODUCTS LTD.



MATERIAL SAFETY DATA SHEET

# RE002

ASPHALT SHINGLES AND OTHER ASPHALT COATED PRODUCTS WITH FIBERGLASS BASE

SECTION I PRODUCT INFORMATION

Product Name (s) Asphalt shingles ( Everest, Harmony, Weather-Tite GL, Dakota, Yukon) BP Base Sheet, BP Glassgard

Brand Name (s) BP Roofing Shingles, BP Base Sheets, Glassgard

Manufacturer's Name EMCO Building Products Ltd
Address 9510 St-Patrick Street
Lasalle, Québec, Canada H8R 1R9

Emergency Phone Numbers

- Maritimes (514) 364-0161
Québec (514) 364-0161
Ontario (514) 364-0161
Manitoba (403) 466-1135
Saskatchewan (403) 466-1135
Alberta (403) 466-1135
Bristish Colombia (403) 466-1135

Product Uses For low and high (inclined) sloped roofs, as water shedding roof protector, or for all roofing on low sloped roofs.

Product Formula Mixture of asphalt, granular surfacing, inert mineral fillers bonded to a fiberglass mat.

SECTION II PREPARATION INFORMATION

Prepared by EMCO Building Products Ltd
9510 St-Patrick Street
Lasalle, Québec, Canada H8R 1R9

Date of Preparation Sept. 1999
Date of Revision March 2005

SECTION III HAZARDOUS INGREDIENTS

Asphalt 25% to 40%

**ASPHALT SHINGLES AND OTHER ASPHALT COATED PRODUCTS WITH FIBERGLASS BASE**

**SECTION IV PHYSICAL DATA**

|                                |  |
|--------------------------------|--|
| <u>1. Physical State</u>       | Solid (Asphalt coated, Surfaced sheets)  |
| <u>2. Odour and Appearance</u> | Odour - Slight petroleum odour - sheet forms<br>Colour - Sheet forms colored mineral granules/white talc or sand covered blackish (asphaltic) colour |
| <u>3. Specific Gravity</u>     | 1.8 to 2.5   |
| <u>4. Boiling Point</u>        | Not applicable   |
| <u>5. Vapour Pressure</u>      | Not applicable   |
| <u>6. Solubility in Water</u>  | Not applicable   |

**SECTION V FIRE AND EXPLOSION DATA**

|  |   |
|--|---|
| <u>Flash Point</u>                         | Minimum 265°C (approx.)   |
| <u>Flammable limits in air % by volume</u> | Unknown   |
| <u>Auto-ignition Temperature</u>           | 370°C - 480°C (approx.)   |
| <u>Fire and Explosion Hazards</u>          | Addition of water or foam may cause frothing. Flammage gas emitted on heating.  |
| <u>Extinguishing Method</u>                | Water spray, dry chemical, carbon dioxide for smal fires.   |
| <u>Fire Fighting Procedures</u>            | Use water spray to cool fire-exposed area and as a protective screen. Self-contained breathing apparatus should be worn to protect against possible release of hydrogen sulfide and sulfur dioxide is material is burning. Do not point solid water directly into burning asphalt to avoid spreading. |



**ASPHALT SHINGLES AND OTHER ASPHALT COATED PRODUCTS WITH FIBERGLASS BASE**

**SECTION V REACTIVITY DATA**

|                                 |   |
|---------------------------------|---|
| <u>Stability</u>                | Stable  |
| <u>Conditions to Avoid</u>      | Excessive heat approaching flash point  |
| <u>Materials to Avoid</u>       | Oxidizing agents, strong acids  |
| <u>Hazardous Decomposition</u>  | CO <sub>x</sub> , SO <sub>x</sub> , NO <sub>x</sub> , Sulfur compounds, smoke |
| <u>Hazardous Polymerization</u> | Not known to happen   |

**SECTION VI ENVIRONMENTAL AND DISPOSAL INFORMATION**

Product as produced is in solid state. For disposal use standard approved waste disposal procedures. If product has been affected by heat of fire and asphalt in a fluid state has been affected by heat of fire and asphalt in a fluid state has been released from product, then allow to cool and solidify before disposal. Break it up and collect in appropriate containers such as drums.

**SECTION VII HEALTH HAZARD DATA**

This manufactured product as produced and when used under ambient conditions poses no health hazards. However, if product is heated beyond 200°C or if it catches fire, then the major constituent asphalt (bitumen) will emanate slightly toxic fumes. Melted asphalt (bitumen) from the product could act as a fuel and contribute to the fire.

Toxicity Data The International Agency for Research on Cancer states that there is inadequate evidence that bitumens alone are carcinogenic to humans.

Effects of Over-Exposure

|                      |   |
|----------------------|---|
| <u>Inhalation</u>    | Fumes from hot asphalt cause nausea, headache, dizziness.                                 |
| <u>Skin and Eyes</u> | Hot asphalt burns skin and eyes. Prolonged or repeated skin contact may cause dermatitis. |
| <u>Ingestion</u>     | Ingestion is unlikely.  |

Note: Under extreme heat, product may liberate hot fluid asphalt.



**ASPHALT SHINGLES AND OTHER ASPHALT COATED PRODUCTS WITH FIBERGLASS BASE**

**SECTION IX FIRST AID**

Emergency and First Aid Procedures Information

- Skin For hot asphalt splash, cool part by water immersion or shower. Do not attempt removal of asphalt from part but split longitudinally, if circumferential, to avoid tourniquet effect. For skin soiling without underlying burn, cleanse with mineral oil followed by soap and water.
- Eyes Copious warm water flush for 15 minutes. Physician assessment if eyes are inflamed. Cleanse soiling with olive oil.
- Inhalation Evacuate to fresh air. Apply CPR if required. Physicians assessment mandatory.
- Ingestion Not applicable.

**SECTION X HANDLING PRECAUTIONS**

For product as produced, there are no special handling procedures required other than wearing gloves to protect hands from physical scratches or asphalt stains.

**SECTION XI ADDITIONAL INFORMATION**

For product as produced and used, there are no special safety procedures required.

Should product catch fire through external sources, remain upwind of the fire. Avoid skin and eye contact. Avoid inhalation of fumes.

Since this product is a "Manufactured Article", EMCO Building Products Limited is not required by law to produce a Material Safety Data Sheet. This Material Safety Data Sheet is provided as a customer service information.

The recommendations and data presented are believed to be correct. However, no warranty is expressed or implied regarding the accuracy of the data or the results obtained from the use of this information.

**Exhibit 6**

*Contracts and Letters of Intent for Post-  
Operation Products*



## Tri-County Materials LLC

3701 Bay Rd

Dover De, 19901

March 15, 2021

R&M Recycling LLC  
242 N. James Street  
Newport De, 19804

RE: Purchase of Shingles

To Whom It May Concern,

The purpose of this letter is to inform you of our continued interest to purchase processed shingles from your facility.

Should you have any questions please feel free to contact me by phone at 302-420-5826 or email [plester@diamondmaterials.com](mailto:plester@diamondmaterials.com)

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul H. Lester", with a long horizontal flourish extending to the right.

Paul H. Lester

Phone: (302) 658-6524



Fax: (302) 658-0684

Asphalt • Paving • Excavation • Pipework • Concrete • Demolition  
924 South Heald Street • Wilmington, Delaware 19801

March 15, 2021

R&M Recycling LLC  
242 N. James Street  
Newport De, 19804

RE: Purchase of Shingles

To Whom It May Concern,

The purpose of this letter is to inform you of our continued interest to purchase processed shingles from your facility.

Should you have any questions please feel free to contact me by phone at 302-420-5826 or email [plester@diamondmaterials.com](mailto:plester@diamondmaterials.com)

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul H. Lester", with a long horizontal flourish extending to the right.

Paul H. Lester

**Exhibit 7**

*Closure Plan*



---

# Facility Closure Plan

## Processing of Asphalt Shingles at the R&M Recycling, LLC Facility

**R&M Recycling, LLC**

924 Heald Street

Wilmington, DE 198014

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**R&M Recycling, LLC**  
**Asphalt Shingles Recycling Facility**  
**Closure Plan**

**1.0 INTRODUCTION**

This Closure Plan (the Plan) describes the activities that R&M Recycling, LLC (“R&M”) will employ to close its asphalt shingle recycling facility in a manner that:

- a. Minimizes the need for further maintenance;
- b. Ensures the removal of onsite product and recyclable material inventories;
- c. Minimizes the potential environment impacts of the facility, subsequent to closure.

This Plan includes closure cost estimates based on the removal and final management of the maximum storage volumes permitted at the site. Additionally, the Plan discusses the financial requirements that will be established to ensure that the elements of this Plan can be appropriately implemented.

**2.0 SITE DESCRIPTION**

The site is located at 924 Heald Street, Wilmington, Delaware 19801. The site is located east of Heald Street (US 13) and west of New Castle Avenue (SR 9) in the City of Wilmington. The site is surrounded by other heavy industrial activities. The recycling facility includes the following operational levels:

- Receiving/Check-in Area (Scale and Scale House)
- Unprocessed Material Storage Area
- Processing Area (for grinding and screening)
- Processed Material Storage Area

### **3.0 DESCRIPTION OF ACTIVITY**

R&M's asphalt shingles recycling facility will receive shingles from offsite sources. Shingles will be received from both Pre-Consumer sources (i.e., shingles that have not previously been utilized as roofing over, which are discards and cut offs from various sources) and Post-Consumer sources (i.e., shingles that have been previously used as roofing cover or are collected from construction contractors, demolition sites, roofers or home owners).

Shingles will be placed through a grinding process at the facility and recycled into a raw material that can be resold and used in pavement sub base for highway and roadways or as feedstock for hot/cold mix asphalt plants. This recycling process will ultimately prevent this material from being disposed of in local landfills.

The R&M Recycling Facility is designed to recycle up to approximately of 62,500 tons of waste asphalt shingles annually.

### **4.0 PROCEDURES FOR FACILITY CLOSURE**

The Plan addresses the removal of both the pre-processed shingle material and post-processed finished products. These two distinctly different materials will be stored separately at the facility. The facility consists of the following work areas:

- An Unprocessed Material Storage Area
- A Processing Area (used for grinding and/or sorting the unprocessed shingles);
- A Processed Material Storage Area (i.e., for storage of the final product)

#### **4.1 Unprocessed Material Storage Area**

Closure activities and removal of material from the facility will mainly occur in the Unprocessed Material Storage Area. This Storage Area has the capacity to store up to approximately 8,000 tons (or about 16,000 cubic yards) of unprocessed shingle product. Unprocessed pre-consumer and post-consumer shingles that arrive at the facility are placed in this area for storage prior to processing. Incoming materials are segregated and staged based of their designation as used or unused shingles and to facility pre-process sampling of the storage stockpiles.



## 4.2 Processing Area

As detailed above, the facility will segregate the unprocessed materials into separate piles of pre-consumer shingles and post-consumer shingles in the Unprocessed Material Storage Area. Subsequent to acceptance and testing (when required), the unprocessed shingles will be moved to the processing area.

Pre-consumer shingles generally do not require any pre-processing to prepare the shingles to be processed through the grinder. Post-consumer shingles from the Unprocessed Material Storage Area will generally be moved to the Process Area for pre-processing to remove any debris or non-asphalt shingle material. In this Area, employees will hand sort the shingles to remove any unacceptable materials including, but not limited to wood, metals, flashing, etc. These unacceptable items will be placed in appropriate containers (i.e. onsite dumpster) for recycling or disposal.

R&M can store up to 9,000 tons onsite, spread in varying amounts between the Unprocessed Material Storage Area and the Processing Area including the debris and scrap metal. Following sorting, the post-consumer shingles may either be returned to the Unprocessed Material Storage Area or they may be fed directly into the grinder for final processing. R&M may also process or grind shingles directly in the Unprocessed Material Storage Area.

R&M will have a horizontal grinding unit onsite to periodically process/grind the shingles to produce the final recycling asphalt. Individual loads of shingle material will be placed in the infeed conveyor/ hopper to the grinder. Limited sorting will be done within the grinder. R&M may opt to utilize a screener in tandem with the grinding to remove any unacceptable materials missed during pre-processing. As the Process Area is used for active processing, shingles are only staged in this Area for short periods of time.



### 4.3 Processed Material Storage Area

Post-Processed material is stored in the Processed Material Storage Area. This Area can store up to 1,000 tons of processed material for resale and shipment to offsite outlets. As needed, processed material may also be placed in the Unprocessed Material Storage Area to accommodate periodic breaks in the resale of the final product due to regular winter shutdowns of local asphalt plants and seasonal delays in road construction. However, the amount of processed material stored in all of the Storage Areas onsite including the Processed Material Storage Area and Unprocessed Material Storage Area will not exceed 9,000 tons.

## 5.0 CLOSURE COST ESTIMATE

An estimate of the costs associate with the closure activities described in the Plan is provided below:

| Operating Areas  | Units      | Unit Cost     | Total        |
|--|------------|---------------|--------------|
| Transportation & disposal of unprocessed material in two (2) Pre-Processing Staging Areas        | 7,950 Tons | \$54.85/ton   | \$436,057.50 |
| Transportation of unacceptable materials for recycling from the Pick & Sort Area and dumpster(s) | 50 Tons    | \$54.85/ton   | \$2,742.50   |
| Labor, Equipment, Transportation and Reuse of Processed Asphalt Shingles (See Exhibit 8)         | 1,000 Tons | \$54.85/ton   | \$54,850.00  |
|  |            | <b>Total:</b> | \$493,650.00 |

## **6.0 FINANCIAL ASSURANCE**

R&M Recycling, LLC has established an appropriate financial assurance mechanism for the closure cost amount indicated in Section 5.0 above. This financial assurance mechanism will be consistent with the requirements specified in Section 1301 of the Delaware Regulations Governing Solid Waste, Paragraph 4.1.11.2, and will be updated annually for inflation or whenever a change in the Plan occurs. The financial assurance mechanism for closure will be established and approved by the Department prior to commencing any operation at the facility. R&M Recycling, LLC will keep a copy of the most recent closure cost estimate at the facility during its operating life.

**Exhibit 8**

*Final Supporting Documents for the  
Closure Plan*

## Closure Cost Summary Table

| <u>Item/Task</u>  | <u>Estimated Volume</u> | <u>Unit Cost</u> | <u>Total</u> |
|---|-------------------------|------------------|--------------|
| Labor, Equipment, Transportation and Disposal of Unprocessed Asphalt Shingles   | 7,950 tons              | \$54.85/ton      | \$436,057.50 |
| Labor, Equipment, Transportation and Disposal of Unacceptable Materials for Recycling from the Pick & Sort Area and Dumpster(s) | 50 tons                 | \$54.85/ton      | \$2,742.50   |
| Labor, Equipment, Transportation and Reuse of Processed Asphalt Shingles.   | 1,000 tons              | \$54.85/ton      | \$54,850.00  |
|   |                         | <b>Total:</b>    | \$493,650.00 |

# Delaware Contracting Co., Inc.

---

June 26, 2021

Mr. Paul Lester  
R&M Recycling

Via email @ [plester@diamondmaterials.com](mailto:plester@diamondmaterials.com)

Dear Paul:

Thank you for letting us quote the transportation and disposal for your shingle project at R&M Recycling, 924 South Heald Street, Wilmington, DE 19801.

Delaware Contracting Company will load, transport and pay the tipping fee for all excess shingles left on the property that require proper disposal. This rate will be \$54.85 per ton, all inclusive. We have 125 trucks and 5,000 roll-off cans at our disposal and can mobilize with an hour's notice. This quote for R&M Recycling and the Delaware Department of Natural Resources and Environmental Control will be valid until June 26, 2026.

Our disposal locations are as follows:

Waste Management Landfill  
198 Marsh Lane  
Wilmington DE 19801

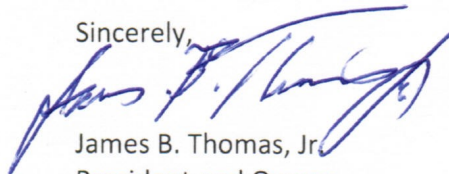
Mercer Group International  
1519 Calhoun Street  
Trenton NJ 08638

County Conservation  
212 Barnswood Road  
Sewell NJ 08080

A.J. Blosenski  
1060 Conshohocken Road  
Conshohocken PA 19428

I hope this information is sufficient. Please call us if you have any questions.

Sincerely,



James B. Thomas, Jr.  
President and Owner



www.equipmentwatch.com

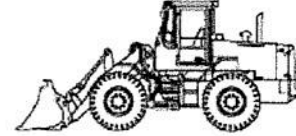
All prices shown in US dollars (\$)

## Rental Rate Blue Book®

March 29, 2021

**Caterpillar 950H (disc. 2012)**  
4-Wd Articulated Wheel Loaders

Size Class:  
175 - 199 HP  
Weight:  
40435 lbs



### Configuration for 950H (disc. 2012)

Operator Protection

**EROPS**

Power Mode

**Diesel**

### Blue Book Rates

\*\* FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

|                                       | Ownership Costs       |                       |                     |                    | Estimated Operating Costs<br>Hourly | FHWA Rate**<br>Hourly |
|---------------------------------------|-----------------------|-----------------------|---------------------|--------------------|-------------------------------------|-----------------------|
|                                       | Monthly               | Weekly                | Daily               | Hourly             |                                     |                       |
| Published Rates                       | USD \$6,175.00        | USD \$1,730.00        | USD \$435.00        | USD \$65.00        | USD \$36.56                         | USD \$71.65           |
| <b>Adjustments</b>                    |                       |                       |                     |                    |                                     |                       |
| Region ( 100%)                        | -                     | -                     | -                   | -                  |                                     |                       |
| Model Year (2012: 100%)               | -                     | -                     | -                   | -                  |                                     |                       |
| Adjusted Hourly Ownership Cost (100%) | -                     | -                     | -                   | -                  |                                     |                       |
| Hourly Operating Cost (100%)          |                       |                       |                     |                    |                                     |                       |
| <b>Total:</b>                         | <b>USD \$6,175.00</b> | <b>USD \$1,730.00</b> | <b>USD \$435.00</b> | <b>USD \$65.00</b> | <b>USD \$36.56</b>                  | <b>USD \$71.65</b>    |

### Non-Active Use Rates

|              | Hourly      |
|--------------|-------------|
| Standby Rate | USD \$21.40 |
| Idling Rate  | USD \$51.11 |

### Rate Element Allocation

| Element                     | Percentage | Value             |
|-----------------------------|------------|-------------------|
| Depreciation (ownership)    | 47%        | USD \$2,902.25/mo |
| Overhaul (ownership)        | 39%        | USD \$2,408.25/mo |
| CFC (ownership)             | 4%         | USD \$247.00/mo   |
| Indirect (ownership)        | 10%        | USD \$617.50/mo   |
| Fuel (operating) @ USD 2.53 | 44%        | USD \$16.02/hr    |

Revised Date: 1st half 2021

These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.



ENTERPRISES, INC.

Paul Lester  
Diamond Materials  
924 S. Heald Street  
Wilmington, DE 19801

January 2, 2021

RE: Hauling and disposal for Shingles

Mr. Paul Lester,

Below are the rates for us to supply dumpster and haul your Shingle and debris from your site to the Landfill.

- Haul and Disposal of Debris: \$54.00 per ton

If anything else is needed, please let me know.

Thank you,

*Richard Trautman*

Roll Off Operations GM

**RBS Enterprises, Inc.** \ *Division of* **A.J. Blosenski, Inc.**

Office: 610-701-9921

Fax: 610-701-9926

Cell: 484-325-0648

[richardtrautman@ajblosenski.com](mailto:richardtrautman@ajblosenski.com)

[www.RBSEnterprises.com](http://www.RBSEnterprises.com)

[www.ajblosenski.com](http://www.ajblosenski.com)

INCREASE PENALTY RIDER

BOND No. 019041522

Attached to and forming part of Bond # 019041522 dated the 14th Day of September, 2012 executed by Liberty Mutual Insurance Company as Surety on behalf of R&M Recycling, LLC as Principal, and in favor of Department of Natural Resources and Environmental Control as Oblige and in the amount of Four Hundred Sixteen Thousand and 00/100 Dollars.

In consideration of the agreed premium charged for this bond, it is understood and agreed that Liberty Mutual Insurance Company hereby consents that effective from the 30th day of March 2021 said bond shall amended as follows:

The Bond Penalty shall be INCREASED:

FROM: Four Hundred Sixteen Thousand and 00/100 (\$416,000.00)

TO: Four Hundred Ninety Four Thousand Nine Hundred Sixty and 00/100 (\$494,960.00)

The INCREASE of said bond penalty shall be effective as of the 30th day of March, 2021 and does hereby agree that the continuity of protection under the said bond subject to changes in penalty shall not be impaired hereby, provided that the aggregate liability of the above mentioned bond shall not exceed the amount of liability assumed by it at the time the act/or acts of default were committed and in no event shall such liability be cumulative.

Signed, sealed and dated this 30th day of March, 2021

R&M Recycling, LLC

Principal

By: 

Liberty Mutual Insurance Company

Surety,

By: 

Linda Dozier, Attorney-in-Fact







This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8201167-019014

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Kevin P. Adams; Patrick Bucalo; Kevin Connelly; Linda Dozier; Michael J. Mitchell; Martin J. Purcell

all of the city of Philadelphia state of PA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 30th day of April, 2019.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey, Assistant Secretary

David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 30th day of April, 2019 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 30th day of March, 2021.



By: Renee C. Llewellyn, Assistant Secretary

Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.



LIBERTY MUTUAL INSURANCE COMPANY  
 FINANCIAL STATEMENT — DECEMBER 31, 2019

| Assets  |                                | Liabilities  |                                |
|---|--------------------------------|--|--------------------------------|
| Cash and Bank Deposits.....                   | \$778,754,989                  | Unearned Premiums.....                                       | \$8,007,146,482                |
| *Bonds — U.S Government.....                  | 2,780,808,610                  | Reserve for Claims and Claims Expense.....                   | 21,532,853,787                 |
| *Other Bonds.....                             | 12,645,608,792                 | Funds Held Under Reinsurance Treaties.....                   | 507,868,920                    |
| *Stocks.....                                  | 16,385,435,431                 | Reserve for Dividends to Policyholders.....                  | 1,143,826                      |
| Real Estate.....                              | 235,608,378                    | Additional Statutory Reserve.....                            | 125,722,000                    |
| Agents' Balances or Uncollected Premiums..... | 6,217,983,641                  | Reserve for Commissions, Taxes and<br>Other Liabilities..... | 4,117,460,075                  |
| Accrued Interest and Rents.....               | 102,273,390                    | <b>Total.....</b>  | <b>\$34,292,195,090</b>        |
| Other Admitted Assets.....                    | 11,957,106,292                 | Special Surplus Funds.....                                   | \$32,768,443                   |
|   |                                | Capital Stock.....   | 10,000,075                     |
|   |                                | Paid in Surplus.....   | 10,044,978,933                 |
|   |                                | Unassigned Surplus.....                                      | 6,723,636,983                  |
| <b>Total Admitted Assets.....</b>             | <b><u>\$51,103,579,523</u></b> | Surplus to Policyholders.....                                | 16,811,384,434                 |
|   |                                | <b>Total Liabilities and Surplus.....</b>                    | <b><u>\$51,103,579,524</u></b> |



\* Bonds are stated at amortized or investment value; Stocks at Association Market Values.  
 The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2019, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 27<sup>th</sup> day of March, 2020.

*T. Mikolajewski*

Assistant Secretary



## **Exhibit 9**

### *Applicable Permits, Licenses and Approvals*

*DNREC Application for an Air Permit  
for Peterson 4710 Horizontal Grinder*



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF AIR QUALITY  
655 S. Bay Road, Suite 5N  
DOVER, DELAWARE 19901

Telephone: (302) 739 - 9402  
Fax No.: (302) 739 - 3106

June 25, 2014

**Permit: APC-2013/0147- OPERATION(Amendment 1)(NSPS)(MNSR)(SM)**

**R & M Recycling, LLC**  
924 South Heald Street  
Wilmington, DE 19801

ATTENTION: Paul Lester  
Superintendent

Dear Mr. Lester:

Pursuant to 7 DE Admin. Code 1102, Section 2, approval by the Department of Natural Resources and Environmental Control (the Department) is hereby granted for the operation of a 4710 Peterson Grinder rated at 250 tons per hour and discharge conveyor powered by a 765 HP Caterpillar C18 (Tier 2) diesel engine located at 924 South Heald Street, Wilmington, Delaware in accordance with the application submitted on Form Nos. AQM-1, AQM-2, AQM-3.1, AQM-3.3, and AQM-5 dated May 10, 2013 and the amendment request on Forms AQM-1, AQM-2, AQM-3.1, AQM-3.3, and AQM-5 to change the production rate, dated April 10, 2014 all signed by Paul Lester, Superintendent.

This permit is issued subject to the following conditions all of which are federally enforceable except Condition 2.6:

**1. General Provisions**

- 1.1 R & M Recycling Inc. agrees that all limits, restrictions and requirements in this permit are necessary to limit their potential to emit below major source thresholds. Violation of any limit, restriction or requirement contained herein may be grounds for suspension or revocation of the permit or other enforcement action for noncompliance with the permit, the failure to apply for a Title V permit, or the failure to obtain a Title V permit.
- 1.2 Representatives of the Department may, at any reasonable time, inspect this facility.
- 1.3 This permit may not be transferred to another location or to another piece of equipment or process.
- 1.4 This permit may not be transferred to another person, owner, or operator unless the transfer has been approved in advance by the Department. Approval (or disapproval) of the permit transfer will be provided by the Department in writing. A request for a permit

*Delaware's good nature depends on you!*

Printed on  
Recycled Paper

transfer shall be received by the Department at least thirty days before the date of the requested permit transfer. This request shall include:

- 1.4.1 Signed letters from each person stating the permit transfer is agreeable to each person; and
  - 1.4.2 An Applicant Background Information Questionnaire pursuant to 7 Del. C., Chapter 79 if the person receiving the permit has not been issued any permits by the Department in the previous five (5) years.
- 1.5 The owner or operator shall not initiate construction, install, or alter any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department pursuant to 7 **DE Admin. Code** 1102, and, when applicable 7 **DE Admin. Code** 1125, and receiving approval of such application from the Department; except as exempted in 7 **DE Admin. Code** 1102 Section 2.2.

## 2. Emission Limitations

- 2.1 Air contaminant emission level from grinder, conveyor and engine shall not exceed those specified in 7 **DE Admin. Code** 1102 and the following:
- 2.1.1 Total Hydrocarbon (THC) Emissions  
THC emissions shall not exceed 0.37 pound per hour and 0.05 ton per twelve (12) month rolling period;
  - 2.1.2 Nitrogen Oxide (NO<sub>x</sub>) Emissions  
NO<sub>x</sub> emissions shall not exceed 6.96 pounds per hour and 0.87 ton per twelve (12) month rolling period;
  - 2.1.3 Carbon Monoxide (CO) Emissions  
CO emissions shall not exceed 1.14 pound per hour and 0.14 ton per twelve (12) month rolling period;
  - 2.1.4 Sulfur Oxide (SO<sub>x</sub>) Emissions  
SO<sub>x</sub> emissions shall not exceed 0.13 pound per hour and 0.03 ton per twelve (12) month rolling period; and
  - 2.1.5 Particulate Matter (PM<sub>10</sub>) Emissions  
PM<sub>10</sub> emissions shall not exceed 1.11 pound per hour and 0.47 ton per twelve (12) month rolling period.
  - 2.1.6 Particulate Matter (PM) Emissions
    - 2.1.6.1 PM emissions shall not exceed 1.9 pounds per hour and 0.77 ton per twelve (12) month rolling period.
    - 2.1.6.2 PM emissions shall not exceed 0.3 pound per million BTU heat input, maximum 2-hour average.



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- 2.2 No person shall cause or allow the emission of visible air contaminants and/or smoke from the shingle grinder transfer to the stockpile, shingle grinder loading/unloading of ground shingles and the shingle grinder engine exhaust stack, the shade or appearance of which is greater than twenty (20%) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour or more than fifteen (15) minutes in any twenty-four (24) hour period.
- 2.3 The emission of visible air contaminants from the belt conveyor transfer point, except any stockpiles, shall not exceed ten percent (10%) opacity.
- 2.4 The rolling twelve (12) month period emission limits along with the operational limits of this permit are voluntary limitations taken by the owner or operator to reduce the potential to emit nitrogen oxides to below the major source threshold of 7 **DE Admin Code** 1130.
- 2.5 The operational limitation of Condition 3.1.2 is a voluntary restriction taken by the Company to limit emissions of NOx to below the five (5) ton per year applicability threshold of 7 **DE Admin. Code** 1125, Section 4, *Minor New Source Review*. The Company shall meet the control technology requirements of *Minor New Source Review*, 7 **DE Admin. Code** 1125, Section 4, if the Company requests an increase in operating hours or fuel oil consumption that results in a NOx Potential to Emit above five tons per year.
- 2.6 Odors from this source shall not be detectable beyond the plant property line in sufficient quantities such as to cause a condition of air pollution.

**3. Operational Limitations**

- 3.1 The owner or operator shall comply with the following operational limits:
  - 3.1.1 This permit only allows for operation at the following location:
    - 3.1.1.1 924 South Heald Street, Wilmington
  - 3.1.2 The maximum hours of operation for this equipment shall not exceed 250 hours in any rolling twelve (12) month period from the site.
  - 3.1.3 Production rate shall not exceed to 250 tons per hour.
  - 3.1.4 The grinder shall only be powered by the 765 HP Caterpillar C18 (Tier 2) diesel engine.
  - 3.1.5 The Company shall combust only diesel fuel (No. 2 fuel oil) in the grinder engine.
  - 3.1.6 No. 2 fuel oil consumption for the grinder engine shall not exceed 9400 gallons per rolling twelve month period.



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- 3.1.7 The sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent by weight sulfur prior to July 1, 2016 and 0.0015 percent sulfur by weight on and after July 1, 2016, as evidenced by fuel oil supplier certifications that include the following:
  - 3.1.7.1 The name of the oil supplier.
  - 3.1.7.2 The oil complies with the specifications for fuel oil No. 2 , as defined by the American Society for Testing and Materials in ASTM D396, "Standard Specification for Fuel Oils."
  - 3.1.7.3 The sulfur content of the oil as determined by ASTM methods: D129, D1552, D2622 or D4294.
  - 3.1.7.4 Transition Period for Distillate Fuel:  
Fuel having a sulfur content equal to or less than 0.05% by weight but greater than 15 ppm by weight may be purchased, and used on and after July 1, 2016 only as specified below:
    - 3.1.7.4.1 Distillate fuel stored within Delaware prior to July 1, 2016 may be used through June 30, 2017, provided records are kept for a period of two (2) years which document and certify the fuel was stored within Delaware prior to July 1, 2016.
    - 3.1.7.4.2 Distillate fuel that meets the requirements of Condition 3.1.7.4.1 above that is purchased and received for use on or before June 30, 2017 may be used after June 30, 2017.
- 3.1.8 The grinder shall only be used to grind wood or asbestos free shingles.
- 3.1.9 The Company shall only process asbestos free asphalt shingles.
- 3.1.10 The water spray dust suppression system for the shingle grinder and discharge conveyor belt shall be in proper operation when the equipment is operating and shall be regulated to control visible emissions.
- 3.2 Fugitive emissions shall not be emitted in such quantities as to cause or create a condition of air pollution from material-handling operations, the stockpiling of materials or vehicular traffic entering or leaving the facility. Dust control measures shall be employed on all non-paved access roads and driveways to the facility to minimize fugitive emissions from vehicular traffic entering or leaving. Dust control measures shall include methods such as water tanker/sprinkler trucks, water sprinkler systems, dust retardant sprays, etc.
- 3.3 Prior to grinding, all material shall be wetted with water to minimize the generation of dust during processing.
- 3.4 All storage piles shall be wetted as needed to control any fugitive dust. The ground asphalt shingle product storage piles shall be sprayed down with water at the end of each day to ensure that the outer layer of material is sufficiently wet to form an encrustation barrier over the stockpiles to limit potential fugitive dust.

- 3.5 At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 3.6 All structural and mechanical components of the equipment or process covered by this Permit shall be maintained in proper operating condition.
- 3.7 The shingle grinder shall not be operated unless the facility has a valid Beneficial Use Determination (BUD) from the Solid and Hazardous Waste Management Section.
- 3.8 All post-consumer asphalt shingles shall be sampled and analyzed for asbestos according to the procedures in the Beneficial Use Determination (BUD) issued by DNREC's Solid and Hazardous Waste Management Section.
- 3.9 The procedures outlined in the Beneficial Use Determination (BUD) issued by DNREC's Solid and Hazardous Waste Management Section shall be followed for acceptance, processing and storage of all shingles.

**4. Testing and Monitoring Requirements**

- 4.1 Within sixty (60) days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup of such facility, the owner or operator shall conduct a Reference Method 9 visible emission test and furnish the Department with a written report of the results of such test in accordance with the following general provisions:
  - 4.1.1 The Company shall notify the Department thirty (30) days in advance to give the Department the opportunity to witness the test.
  - 4.1.2 The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original and one (1) copy of the test reports shall be submitted to the address below:

Division of Air Quality Management  
Engineering & Compliance Branch  
Attn: Permitting Engineer  
Blue Hen Corporate Center  
655 S. Bay Road, Suite 5 N  
Dover, DE 19901
  - 4.1.3 The results must demonstrate to the Department's satisfaction that the emission unit is operating in compliance with the applicable regulations and conditions of this permit; if the final report of the test results shows non-compliance the owner or operator shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.



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- 4.2 The following applies to visible emission tests for the shingle or Wood grinder materials transfer to the stockpile and shingle or wood grinder materials loading/unloading:
  - 4.2.1 The Company shall conduct a daily survey during daylight hours when the equipment is in operation to detect the presence or absence of visible emissions according to the following procedure:
    - 4.2.1.1 "Survey of emission point for the presence or absence of visible emissions" shall be defined as a minimum period of five (5) consecutive minutes. The survey of the emission units concurrently is acceptable provided all emission points are easily observable from the observer's position.
    - 4.2.1.2 The detection of the presence or absence of visible emissions shall be in accordance with the procedures of EPA Reference Method 22 (40 CFR 60, Appendix A) paragraphs 4 and 5.
    - 4.2.1.3 If visible emissions are observed from an emission point for three (3) consecutive minutes during a survey, the observation shall be stopped and corrective actions per Condition 4.2.2 shall be taken.
    - 4.2.1.4 The procedure does not require that the opacity of the emissions be determined. Since this procedure requires only the determination of whether a visible emission occurs and does not require the determination of opacity levels, observer certification according to the procedures of EPA Reference Method 9 (40 CFR 60, Appendix A) are not required. However, it is necessary that the observer is educated on the general procedures for determining the presence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor).
  - 4.2.2 If visible emissions are observed, the Company must identify and correct the cause of the excess emissions within forty-eight (48) hours. If the problem is not corrected, the Company must call the Department.
- 4.3 The Company shall conduct modified Reference Method 9 visible emission tests to establish compliance with the visible emissions standard of Condition 2.2 in accordance with 7 **DE Admin. Code** 1120 Section 1.5.3 (i.e., "modified" 40 CFR Part 60 Appendix A Reference Method 9) for the shingle grinder engine exhaust stack whenever the excess emissions are observed.
- 4.4 The Company shall conduct opacity tests to establish compliance with the visible emissions standard of Condition 2.2 for the transfer point.
  - 4.4.1 Compliance shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60, with the following additions:
    - 4.4.1.1 The minimum distance between the observer and the emissions source shall be 4.57 meters (15 feet).
    - 4.4.1.2 The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g. road dust). The

required observer position relative to the sun (Method 9, Section 2.1) must be followed.

4.4.1.3 For affected facilities using wet dust suppression for PM10 control, a visible mist is sometimes generated by the spray. The water mist must not be confused with PM10 emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

4.4.2 When determining compliance with the fugitive emissions standard for the conveyor transfer point, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

4.4.2.1 There are no individual readings greater than ten percent (10%) opacity.

4.4.2.2 There are no more than three (3) readings of ten percent (10%) for the one (1) hour period.

4.5 The Department reserves the right to require the Company to perform stack emissions tests using methods approved in advance by the Department in order to demonstrate compliance with emission limits and visible emissions.

**5. Record Keeping Requirements**

5.1 The owner or operator shall maintain all records necessary for determining compliance with this permit in a readily accessible location for five (5) years and shall make these records available to the Department upon written or verbal request.

5.2 The following information shall be recorded, initialed and maintained in a log each day:

5.2.1 Statements that proper dust control measures are properly employed.

5.2.2 Total operating hours.

5.2.3 Production capacity (TPH).

5.2.4 Visible emissions and corrective actions.

5.2.5 Statement that the water spray dust suppression system is in operation.

5.2.6 Product Ground (Wood or Shingle)

5.3 The following information shall be recorded, initialed and maintained in a log each month:

5.3.1 Monthly and rolling twelve month total No. 2 fuel oil consumption.

5.3.2 Monthly and rolling twelve month total hours of grinder operation.



- 5.4 The following information shall be maintained in a file:
  - 5.4.1 Fuel supplier certifications of the parameters listed in Condition 3.1.7 for each delivery of No. 2 fuel oil.
  - 5.4.2 Documentation for each shipment of shingles that includes the source of the asphalt shingles and certification that shingles are asbestos free.
  - 5.4.3 A maintenance/inspection log shall be maintained detailing all routine and non-routine maintenance performed, including air pollution control equipment.
  - 5.4.4 Performance testing measurements, stack testing measurements conducted for compliance demonstration, stack testing measurements conducted for Department determination purposes, and process and control equipment operating parameters sustained during stack testing.
  - 5.4.5 All opacity observations conducted for compliance demonstration and observer certification.
- 5.5 The rolling twelve (12) month total emissions shall be calculated and recorded each month in a log for each of the following pollutants. These emissions shall be included in the facility-wide emissions for each site.
  - 5.5.1 Volatile Organic Compounds
  - 5.5.2 Nitrogen Oxide
  - 5.5.3 Carbon Monoxide
  - 5.5.4 Sulfur Oxide
  - 5.5.5 Particulate Matter (PM<sub>10</sub>)
  - 5.5.6 Particulate Matter (PM)

**6. Reporting Requirements**

- 6.1 The Company shall furnish the Department and EPA written notification as follows:
  - 6.1.1 A notification of the actual date of initial start-up of the facility within 15 days after such date.
  - 6.1.2 A notification of the date construction or reconstruction of the facility is commenced postmarked no later than thirty (30) days after such date.
  - 6.1.3 A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies,



unless that change is specifically exempted under an applicable subsection. This notice shall be postmarked sixty (60) days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date change. The Department may request additional relevant information subsequent to this notice.

6.2 The owner or operator shall submit to the Department and EPA the following information about any replacement facilities or any new equipment:

6.2.1 For a conveyor belt:

6.2.1.1 The width of the existing belt being replaced and

6.2.1.2 The width of the replacement conveyor belt.

6.2.2 For a shingle grinder:

6.2.2.1 The rated capacity in tons per hour of the existing facility being replaced and

6.2.2.2 The rated capacity in tons per hour of the replacement equipment.

6.3 Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery by calling the Environmental Emergency Notification and Complaint number, (800) 662-8802.

6.4 In addition to complying with condition 6.3 of this permit, any reporting required by 7 DE **Admin. Code 1203 "Reporting of Discharge of a Pollutant or an Air Contaminant"**, and any other reporting requirements mandated by the State of Delaware, the owner or operator shall for each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, supply the Department in writing with the following information:

6.4.1 The name and location of the facility;

6.4.2 The subject source(s) that caused the excess emissions;

6.4.3 The time and date of the first observation of the excess emissions;

6.4.4 The cause and expected duration of the excess emissions;

6.4.5 For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and

6.4.6 The proposed corrective actions and schedule to correct the conditions causing the excess emissions.

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- 6.5 Each document submitted to the Department/EPA pursuant to this permit shall be sent to the following addresses:

|  |  |
|--|--|
| State of Delaware -- DNREC<br>Division of Air Quality<br>Blue Hen Corporate Center<br>655 S. Bay Road, Suite 5 N<br>Dover, DE 19901<br>ATTN: Division Director | United States Environmental Protection Agency<br>Associate Director of Enforcement (3AP10)<br>1650 Arch Street<br>Philadelphia, PA 19103 |
| No. of Originals: <u>1</u> & No. of Copies: <u>1</u>   | No. of Copies: <u>1</u>  |

**7. Administrative Conditions**

- 7.1 This permit shall be made available on the premises.
- 7.2 Failure to comply with the provisions of this permit may be grounds for suspension or revocation.
- 7.3 This permit supersedes **Permit: APC-2013/0147-OPERATION (NSPS)(MNSR)(SM)**, dated October 11, 2013.

Sincerely,



Paul E. Foster, P.E.  
Program Manager  
Engineering & Compliance Branch

PEF:ASM:CMD;slb  
F:\EngAndCompliance\CMD\cmd14056.doc

pc: Dover File  
Chandu Dalsania

**Exhibit 10**

*Background Statement*

# Delaware

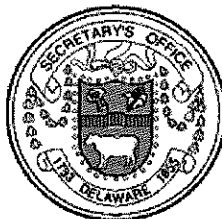
Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "R&M RECYCLING, LLC" IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE TWENTY-FIRST DAY OF JUNE, A.D. 2021.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "R&M RECYCLING, LLC" WAS FORMED ON THE NINTH DAY OF MARCH, A.D. 2012.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN PAID TO DATE.



  
Jeffrey W. Bullock, Secretary of State

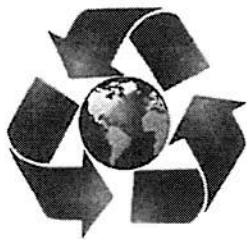
5121741 8300

SR# 20212497328

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

Authentication: 203487575

Date: 06-21-21



**R&M Recycling**  
924 S. Heald Street  
Wilmington De, 19801

## Authority

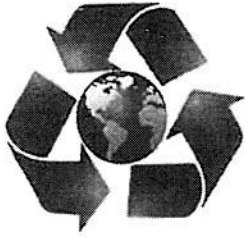
Director: Richard E. Pierson 50% Ownership  
Director: Michael K. Pierson 50% Ownership  
Executive Vice President: Paul H. Lester

### Registered Agent:

Romano Garubo & Argentieri  
52 Newton Ave Woodbury NJ 08096  
856-384-1515

R&M Corporate Information:  
Wilmington, Delaware  
Formation Date: March 9, 2012  
File# 5121741  
EIN# 45-4923698





R&M Recycling  
924 S. Heald Street  
Wilmington De, 19801

## DNREC PERMITS HELD

Permit # APC-2013/0147 Air Permit for shingle grinder