

MEMORANDUM

TO: Board of Commissioners
FROM: Jeannine McCrumb, Compliance Specialist and Josh Estey, Director of Compliance
DATE: August 18, 2022
RE: Request for Waiver of Asphalt Shingle Recycling Requirement and Request for Solid Waste Management Fee Exemption from Myers Recycling Facility

Dave Anger and Ryan Myers of Myers Recycling Facility met with us August 1 and asked for some relief to the storage and processing of asphalt shingles. They are in discussions with Casella about the use of this material for landfill road base and are also requesting that processed shingles – material that has been cleaned or cleaned and shredded—be exempt from CSWD’s Solid Waste Management Fee (SWMF) if used in this manner. Mr. Anger and Mr. Myers indicated that high fuel prices coupled with truck driver shortages are making it economically unfeasible to get materials to market at this time. The current market for this material is located approximately 300 miles away in CT.

Q1. ASPHALT SHINGLE RECYCLING WAIVER

A. What the current law requires:

1) State - Beginning on or after January 1, 2015, if a person produces 40 cubic yards or more of architectural waste -- defined as discarded drywall, metal, asphalt shingles, clean wood, plywood, and oriented strand board (OSB) -- at a commercial project located within 20 miles of a solid waste facility that recycles architectural waste, the material must be recycled or reused. A commercial project is defined as the construction, renovation, or demolition of a commercial building or of a residential building with two or more residential units.

Solid waste facilities are required to recycle the architectural waste or arrange for its reuse unless the facility demonstrates to the Secretary a lack of market for recycling or reuse and a plan for reentering the market when it is reestablished OR arrange for a method of disposition of the architectural waste that the Secretary deems appropriate as an end use, including transfer to an out-of-state facility that recycles architectural waste and similar materials.

2) District – Effective 7/1/2016, the District banned ALL asphalt shingles from disposal along with OSB and plywood. Clean wood and metal were already banned from disposal in the District and the District chose not to ban drywall above and beyond the state requirement.

Ordinance Section 3.19 allows for a waiver of Separation and/or Placement Requirements by the District on a case-by-case basis. “Separation” is defined as the segregation and collection of materials, apart from Solid Waste destined for Disposal, for the sole purpose of Recycling, reuse, Composting, or special handling.

B. Other information:

- 1) The decision to ban shingles seems to have stemmed from discussions with VTrans in 2015 that indicated support for the use of Recycled Asphalt Shingle (RAS) in unbound aggregates which include subbase, base courses, wearing courses on gravel roads and aggregate shoulder adjacent to pavement on highways.
- 2) Myers processes shingles by removing trash (packaging material, wood, nails, etc). The material is then sent to Whitcomb's where additional processing occurs. The result is a finely shredded material commonly referred to as recycled asphalt shingle (RAS).
- 3) In December of 2020, the VT Dept. of Health raised concerns regarding the use of RAS and brought their concerns to the attention of VTrans managers. The VTrans Chief Engineer sent an email to VTrans managers stating "Until further notice specifying the use of RAS in shoulders or subbase will not be allowed for AOT Highway projects that have not yet been advertised. Projects under construction (if any) may continue but change orders could be considered to remove the material from the project. Over the next few months we will be working with DEC to further evaluate the benefits and risks of using RAS in this way." There has been no further evaluation of the material.
- 4) Effective July of 2022, the State Solid Waste Program required all Solid Waste Management Entities (SWMEs) to provide at least one location within their jurisdiction for the collection of asphalt shingles. They identified Myers Recycling Facility as a processor who can accept this material.
- 5) Additional information reviewed to date:
 - Vermont generates an estimated 25,000 tons of waste shingles a year (2015, VTANR).
 - VTANRs 2018 Waste Characterization Study estimated that approximately 12% (47,000 tons) of municipal solid waste disposed is construction and demolition material. Of that 12%, 18% was identified as roofing materials.
 - October 2019 shingles estimates at Myers/Whitcomb per Anger: 400 tons at Myers, 1500 (1200 processed, 300 clean shingle form) at Whitcomb.
 - July 2022 shingles estimates at Myers/Whitcomb per Anger: 800 tons at Myers, 5000 tons clean shingle form at Whitcomb.
 - Based on reporting provided by Myers, no asphalt shingles or RAS has been sent out-of-state. Material was used in some VTrans pilot projects and has been sold by Whitcomb's for 'local projects & sales'.
 - A very rough estimate of the number of structures that could meet the State definition of commercial and thus be subject to State law is 24,000 (2022, VT Center for Geographic Information E911 data). This includes ~13,500 multi-family structures. In addition, there are approximately 37,000 single-family homes in Chittenden County (2022, CCRPC) subject to District requirements only. Staff thus believes that most of the shingle waste generated and received in District facilities is banned from disposal based on District regulation.
 - 75% of residential roofing projects use asphalt shingles (2019, National Assn. of Home Builders).
 - 85% of residential roofing projects are on existing homes, (2018, NAHB).
 - Distance from Myers to recycling facility approximately 300 miles one way. The facility primarily uses shingle material in the production of hot-mix asphalt. Diesel fuel cost \$5.29 per gallon vs \$3.00 a year ago; trucks get 3 mpg thus they would be paying an additional \$458 per load. (July 2022, Anger w/Myers).
 - Distance from facility (Myers or Casella Transfer) to landfill in Coventry is ~75 miles.
 - It would take in the range of 200 and 350 trips to dispose of 5000 tons of shingle material at Coventry.

C. Evaluation criteria

Our mission

The Chittenden Solid Waste District's mission is to reduce and manage the solid waste generated within Chittenden County in an environmentally sound, efficient, effective and economical manner.

While there is little to no research data on the end-of-life management of shingles, or other construction and demolition materials, staff is providing a qualitative assessment based on information available at this time.

Greenhouse gas emissions associated with the transport to landfill versus the transport to the current market (recycling facility) favor disposal. We recognize there are emissions associated with landfill management as well as in the production of hot mix asphalt.

From an economic perspective, increasing costs for fuel coupled with longer transport distances favors disposal. The fact that there are no additional, viable markets for shingle material at this time favors disposal.

Labor shortages in the trucking industry somewhat equally impact recycling and disposal.

D. Alternative policies for consideration

- Temporarily waive the District separation and collection requirements. This waiver could be applied over a specific timeframe or could be applied to a specific amount of material.
- Waive the District separation and collection requirements outright and plan to amend the ordinance accordingly.
- Maintain the status quo.
- Others for discussion?

Staff supports the consideration of a temporary waiver of the separation and collection requirements for asphalt shingles for a one-year period effective September 1, 2022 and ending on August 31, 2023. A temporary waiver will provide sufficient time for Myers to remove most of the unprocessed material currently on site at their facility as well as the processed material currently being stored at Whitcomb's aggregate processing facility in Colchester. The decision to process additional material will fall to them with the understanding that a waiver beyond one year is not guaranteed. They have stated they have a continuing interest in recycling the material when feasible and this would not discourage that practice.

In an effort to better understand and verify the different types of projects contributing to shingles waste, staff recommends that transfer facilities be required to record the project address for each load of shingles received from roofing companies during the waiver period. Waste shingles are usually source-separated and thus easily identifiable by facility personnel. Staff would provide a status report at the July or August 2023 Board meeting.

Additionally, a temporary waiver would provide additional time for discussions to resume among staff at VTrans regarding using RAS in hot mix. District staff would lend support to VTrans and any other impacted parties in any way that we can to move these discussions forward.

Q2. DISTRICT SOLID WASTE MANAGEMENT FEE EXEMPTION

A. What the current law requires:

8.1 Establishment. In order to provide for the efficient, economical, and environmentally sound Management and regulation of Solid Waste within the District and its member municipalities, there is hereby established a Solid Waste Management Fee. The Solid Waste Management Fee is imposed on all Solid Waste generated in the District including, but not limited to, Solid Waste that is collected for Disposal, however, only twenty-five percent (25%) of the fee shall be imposed on all of the 1) Solid Waste approved by the State for use as landfill daily cover and used as landfill daily cover at Facilities within or without the District and 2) construction and demolition debris fines, derived from the processing of mixed construction and demolition debris for Recycling, and processed concrete contaminated with lead paint, when approved by the State for use in landfill site improvements. The following categories of Solid Waste shall be exempt from the Solid Waste Management Fee: 1) Recyclables that are separated from other Solid Waste and recycled; 2) Compostables that are separated from other Solid Waste and Composted or anaerobically digested at Composting Facilities; 3) Biosolids; 4) non-landfilled Untreated Wood; 5) Hazardous Waste and non-hazardous Solid Waste delivered to certified Hazardous Waste Facilities as defined in the Vermont Hazardous Waste Management Regulations; 6) Regulated Medical Waste delivered to certified Regulated Medical Waste treatment or Regulated Medical Waste Disposal Facilities; 7) Inert Materials, stumps, root masses, rotted wood, and animal carcasses delivered to certified categorical disposal Facilities; 8) Inert Materials approved by the District Executive Director that are used for landfill site improvements; and 9) screened municipal street sweepings, that are approved by the Vermont Agency of Natural Resources to be used in clean fill applications, as well as alternative daily landfill cover, when used as alternative daily landfill cover. The Board of Commissioners may exempt or partially exempt other materials from the imposition of the Solid Waste Management Fee upon good cause shown. The Solid Waste Management Fee is also imposed on 1) any Solid Waste residues generated and collected in the District that are mixed with Recyclables and exceed ten percent (10%) of those Recyclables delivered to Recycling end market Facilities and 2) mixed Solid Waste used in the production of raw materials or products.

8.3 Waiver of the Solid Waste Management Fee. For good cause shown, the District Executive Board may waive or partially waive the imposition of the Solid Waste Management Fee to provide economic incentives to comply with the provisions of this Ordinance, any other ordinance or regulations adopted by the District, District policies, or to reduce the cost of alleviating a specific environmental hazard.

B. Other information:

- 1) Requests for consideration of acceptable uses of solid waste including landfill site improvements must be submitted in writing to the Agency of Natural Resources. The request must include information on the source, amounts, duration and proposed uses of the material in addition to a waste characterization analysis and management plan.
- 2) Casella has expressed an interest in using shingles for road base material at the Coventry landfill. Currently they use 3,000-5,000 tons of virgin aggregate material per year for road building.

C. Evaluation criteria

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Historically, the District has granted a full or partial waiver to materials approved for landfill site improvements by the Agency of Natural Resources. Full waivers have only been applied to inert materials.

The Agency of Natural Resources' policy on the use of architectural wastes in the landfill, prohibits the use of *recyclable* architectural waste in landfill site improvements.

D. Alternative policies for consideration

- Full or partial SWMF exemption
- Temporary exemption
- No exemption
- Others for discussion?

Staff currently does not support an exemption to the SWMF despite historical precedence arguing in the contrary. Use of the material in landfill site improvements is equivalent to disposal and District policies that may incentivize disposal over reuse or recycling seem premature.

Board Action Requested

Discussion on the proposed requests and decisions following discussion.