

# Petition for Determination Identifying Non-Hazardous Secondary DCOI-Treated Wood as a Non-Waste under 40 C.F.R. Section 241.4(a)

June 30, 2020



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June 30, 2020

Via Certified Mail

The Honorable Andrew R. Wheeler Administrator U.S. Environmental Protection Agency Headquarters William Jefferson Clinton Building 1200 Pennsylvania Avenue, N.W. Mail Code: 1101A Washington, DC 20460

Re: Petition for Determination Identifying Non-Hazardous Secondary DCOI-Treated Wood as a Non-Waste under 40 C.F.R. Section 241.4(a)

Dear Administrator Wheeler:

Viance, LLC (Viance) submits this petition under 40 C.F.R. Section 241.4(b) requesting that the U.S. Environmental Protection Agency (EPA) grant a non-waste determination for wood treated with DCOI (4,5-Dichloro-2-n-octylisothiazol-3(2H)-one) as a category under 40 C.F.R. Section 241.4(a).

### **INTRODUCTION**

DCOI is the active ingredient in Viance's UltraPole<sup>™</sup> NXT and UltraArm NXT products for application on industrial wood pole and crossarm applications. DCOI was awarded the prestigious Presidential Green Chemistry Challenge award in 1996 as a marine antifoulant alternative to tributyltin compounds.<sup>1</sup> In the context of this petition, DCOI represents an oil-borne preservative system intended to be used for the vacuum pressure treatment of utility poles, crossarms, transportation (road or rail) bridge timbers, and railroad ties.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> U.S. EPA, *Presidential Green Chemistry Challenge: 1996 Designing Greener Chemicals Award*, available at <u>https://www.epa.gov/greenchemistry/presidential-green-chemistry-challenge-1996-designing-greener-chemicals-award</u>.

<sup>&</sup>lt;sup>2</sup> DCOI is also the active ingredient in EL2 One Pack used as the preservative system to treat Ecolife<sup>®</sup> (EL2) (4,5-dichloro-2-n-octyl-4-isothiazolin-3-one), the best performing, non-metal based, above-ground residential decking product on the market. DCOI may be used on southern pine and other treatable softwood lumber and plywood for above-ground



DCOI is registered as UP-23 (EPA Reg. No. 83997-13) as a general use pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Unlike other wood treatment products that are classified as Restricted Use Pesticides, wood treated with DCOI is not classified as hazardous when disposed under the Resource Conservation and Recovery Act (RCRA). DCOI is non-persistent in soil, breaking down readily into harmless compounds, and its primary quality in the treatment of utility poles is efficacy combined with low environmental impact. Importantly, DCOI has been standardized as a wood preservative by the American Wood Protection Association (AWPA) since 1989.

As demonstrated in the supporting data below and attached, when DCOI-treated wood has outlived its useful life, Viance affirms that it will not be discarded. Rather, it will be processed and managed pursuant to well-established industry practices comparable to those EPA has previously approved and will be legitimately used as fuel in a combustion unit. To the extent any of the legitimacy criteria specified in 40 C.F.R. Section 241.3(d) are not met, DCOI-treated wood is functionally the same as comparable traditional fuels. The balancing of all relevant factors, as relied upon in previous EPA non-waste determinations, requires that DCOI-treated wood similarly be determined to be a non-waste. Distinguished as a Green Chemistry Awardee, DCOI performs at a level comparable to other wood preservative treatments, such as creosote, creosote-borate, copper naphthenate, and copper naphthenate-borate, each of which is a similarly used wood preservative, and EPA has granted non-waste determinations for their use on wooden railroad ties.<sup>3</sup>

### I. <u>PETITIONER'S NAME AND ADDRESS</u>

Viance, LLC 8001 IBM Drive Charlotte, NC 28262

#### II. STATEMENT OF THE PETITIONER'S INTEREST

Viance was formed in 2007 as a joint venture between Rohm and Haas and Rockwood Specialties. Since that time, chemical industry restructuring has resulted in Viance's parent companies changing their names to DuPont de Nemours, Inc. and Venator Materials PLC. Viance provides an extensive range of advanced wood treatment technologies and services to the global wood preservation industry. With expertise in wood biocides and wood protection chemicals, Viance is an industry leader in the development of advanced building material solutions that improve the performance and durability of wood products for sustainable building. Viance

applications in addition to decking, such as fencing, frails, spindles, flooring, sill plates, trellises, gazebos, millwork and joinery, and trim and fascia.

<sup>&</sup>lt;sup>3</sup> 40 C.F.R. § 241.4(a).



introduced Preserve<sup>®</sup> ACQ<sup>®</sup> as an arsenic-free alternative to chromated copper arsenate (CCA) in 1992.

Viance's line of pressure-impregnated wood preservative and fire-retardant product formulations are building-code compliant for residential, commercial, industrial, and agricultural applications. Formulations can be used for decks, railings, fencing, structural framing, in fireretardant applications, in marine uses when wood is in contact with water, and for wood poles for the utility industry.

Viance is a member of the AWPA. Viance introduced DCOI-treated wood poles and crossarms as an alternative to pentachlorophenol-treated poles and crossarms. Pentachlorophenol is a persistent organic pollutant. DCOI-treated wood poles and crossams are standardized by the AWPA, the only American National Standards Institute (ANSI)-accredited peer-review process to recognize wood preservative products. These treated wood solutions are also listed in the annually updated AWPA Book of Standards.

Viance submits this petition for a national determination that DCOI-treated wood products, such as those used in Viance's UltraPole<sup>™</sup> NXT and UltraArm NXT products for the treatment of utility poles and crossarms, may be used for energy generation in combustion units as non-waste fuel.

### III. DESCRIPTION OF THE PROPOSED ACTION

Viance requests that the following language be added to 40 C.F.R. Section 241.4(a): (11) DCOI (4,5-Dichloro-2-n-octylisothiazol-3(2H)-one) treated wood.

#### IV. NEED AND JUSTIFICATION FOR THE PROPOSED ACTION

EPA is authorized to grant a petition for a categorical non-waste determination for a non-hazardous secondary material based upon the weight of the evidence showing that the material has not been discarded in the first instance, or if it is sufficiently processed into a material that can be legitimately used as fuel.<sup>4</sup> A non-waste determination controls the applicable emission standards for combustion units under the Clean Air Act (CAA).<sup>5</sup> DCOI is a non-hazardous secondary material, and the weight of the evidence proves that decommissioned DCOI-treated wood is a valuable fuel for which a non-waste determination should be granted. The proposed action is needed to regulate DCOI-treated wood under the appropriate standard and rebut the

<sup>&</sup>lt;sup>4</sup> 40 C.F.R. § 241.4.

<sup>&</sup>lt;sup>5</sup> Section 112 of the CAA, 42 U.S.C. § 7412, applies to combustion units that burn nonhazardous secondary materials that are not solid wastes under RCRA. CAA Section 129, 42 U.S.C. § 7429, applies to non-hazardous secondary materials that are solid wastes under RCRA.



presumption as it applies to DCOI that a non-hazardous secondary material for combustion is categorized as the burning of a solid waste unless otherwise determined after consideration of a petition filed under 40 C.F.R. Section 241.4(b).

The proposed action is also needed to ensure that the marketplace for treated-wood products that meet the requisite environmental standards remains fair and open. The consideration of petitions for successive or emerging products is necessary to eliminate the advantage conferred upon similarly situated products by virtue of prior such determinations. DCOI-treated wood when used as a fuel source is functionally identical to categorical non-waste fuels that have been codified under 40 C.F.R. Section 241.4(a), such as copper naphthenate-treated railroad ties.<sup>6</sup> A Green Chemistry Challenge Awardee, DCOI-treated wood products are an alternative to creosote and pentachlorophenol, which are used to treat wood products such as utility poles, crossarms, and railroad ties (creosote-treated railroad ties (CTRT) are listed as a categorical non-waste determination under 40 C.F.R. Section 241.4(b)). Unlike creosote, copper naphthenate, and pentachlorophenol wood treatments, DCOI has a reduced odor and, unlike copper naphthenate, contains no heavy metals. Mindful of DCOI's environmental benefits, adding DCOI-treated wood to the categorical listing of non-waste fuels would eliminate any implicit preferential treatment favoring those wood treatment products already listed and thus level the commercial playing field while also advancing the user's ability to meet sustainability objectives.

### V. DCOI-TREATED WOOD IS A NON-HAZARDOUS SECONDARY MATERIAL

DCOI-treated utility poles, crossarms, and railroad ties meet the definition of a nonhazardous secondary material. Pursuant to 40 C.F.R. Section 241.2, a non-hazardous secondary material is a secondary material that, when discarded, would not be identified as a hazardous waste under 40 C.F.R. Part 261. A secondary material is "any material that is not the primary product of a manufacturing or commercial process, and can include post-consumer material, offspecification commercial chemical products or manufacturing chemical intermediates, postindustrial material, and scrap."<sup>7</sup> DCOI is not a hazardous waste under RCRA if disposed. DCOItreated utility poles, crossarms, and railroad ties upon decommissioning will have a secondary use as combustible fuel for energy generation.

<sup>&</sup>lt;sup>6</sup> 40 C.F.R. § 241(a); Additions to the List of Categorical Non-Waste Fuels: Other Treated Railroad Ties, 83 Fed. Reg. 5317 (Feb. 7, 2018) (codified at 40 C.F.R. Part 241). *See also* Additions to Lists of Categorical Non-Waste Fuels, 81 Fed. Reg. 6688 (Feb. 8, 2016) (codified at 40 C.F.R. Part 241).

<sup>&</sup>lt;sup>7</sup> 40 C.F.R. § 241.2.



#### VI. REGULATORY REQUIREMENTS FOR A NON-HAZARDOUS SECONDARY MATERIAL NON-WASTE PETITION

Viance seeks a non-waste determination for DCOI-treated wood that upon decommissioning will be used as a substitute for traditional fuel in boilers and co-generation facilities. Decommissioned utility poles and crossarms treated with DCOI will not be discarded, and those poles and crossarms will be sufficiently processed to convert the treated wood into a legitimate fuel. DCOI-treated wood used in railroad ties will similarly be collected and burned for energy recovery.

Under 40 C.F.R. Section 241.4(b), any person may submit a rulemaking petition to EPA to identify additional non-hazardous secondary materials to be listed under Section 241.4(a). EPA may grant or deny a petition under 40 C.F.R. Section 241.4(b)(5) based upon the weight of the evidence showing:

(i) The non-hazardous secondary material has not been discarded in the first instance and is legitimately used as a fuel in a combustion unit, or if discarded, has been sufficiently processed into a material that is legitimately used as a fuel.

(ii) Where any one of the legitimacy criteria in §241.3(d)(1) is not met, that the use of the non-hazardous secondary material is integrally tied to the industrial production process, that the nonhazardous secondary material is functionally the same as the comparable traditional fuel, or other relevant factors as appropriate.

As discussed below in detail, DCOI-treated utility poles and crossarms meet the requirements for a non-hazardous secondary material that is not discarded in the first instance and is legitimately used as a fuel in combustion units. Viance thus respectfully requests that EPA grant this petition.

#### VII. DCOI-TREATED WOOD TO BE USED AS COMBUSTION FUEL WILL NOT BE DISCARDED

DCOI-treated wood that will be secondarily used as combustion fuel for energy generation will not be discarded. Pursuant to 40 C.F.R. Section 241.4(b)(5)(i), the non-hazardous secondary material must not have been discarded in the first instance to be listed as a non-waste fuel. The material must not have been initially abandoned or thrown away.<sup>8</sup> EPA also concluded that once a material is removed from service, storage for a year or longer without determination

<sup>&</sup>lt;sup>8</sup> 83 Fed. Reg. at 5321.



regarding its final end use (e.g., landscaping, as a fuel or landfilled) indicates that the material has been discarded in the first instance and is a solid waste.<sup>9</sup>

An important factor that influences a utility user's decision as to what preservativetreated wood to choose is the ability to reuse the treated wood upon decommissioning. Facilities that generate or burn non-hazardous secondary materials that are categorical non-waste fuels do not need to make individual determinations on materials regarding their waste status; nonhazardous secondary materials that are not categorically excluded must be evaluated based upon general case-by-case standards and procedures. As such, Viance anticipates and encourages that all DCOI-treated utility poles and crossarms will be decommissioned and sent to energy generation facilities within a year of removal from service (if not converted into an alternative, secondary product). DCOI-treated wood products, including railroad ties, may additionally be used as fuel for combustion.

Upon decommissioning, DCOI-treated wood will be transitioned from its original use as utility infrastructure to secondary products, such as biofuel, within the timespan of one year. There are approximately 50 DCOI-treated utility poles and crossarms currently in service. Viance's customer has treated approximately 100 more that will soon go into service, with a 50-year warranty for its treated-wood products. Exclusion from the list of categorical non-waste fuels may lead to the mistaken notion that DCOI does not meet the same qualifications as other wood treatments, and would require an individual determination to be made on DCOI-treated wood materials for use in combustion units.

Utility poles and crossarms may be removed from service for a variety of reasons, including if a line has to be upgraded or a road needs to be widened, or if a storm or vehicle causes damage to the pole. Customarily, a high percentage of decommissioned utility poles retain their structural qualities, therefore, the utility may re-purpose the poles into other products, such as light poles. Alternatively, the utility may sell the decommissioned wood to companies such as recycling services (reclamation companies) that will convert the wood into a secondary product. The estimated timeline for a utility to decommission and store the treated wood for a reclamation company to obtain and convert the wood into a secondary product varies from a few weeks to a few months.

The decommissioning procedure is generally as follows: the utility service's linemen return decommissioned poles and crossarms to the utility's service center or pole yard. Utilities may need to replace decommissioned poles incrementally, removing the top half first and leaving the older, lower half in place to transfer connections to a new pole. The lower half of the pole may be left in place for several months before it is collected. Reclamation companies generally conduct weekly or monthly pick-ups to collect poles for re-use as secondary products. These products may include industrial fencing for agriculture or other industrial applications. Otherwise, the wood is ground into chips for use as biofuel. The reclamation company often

<sup>&</sup>lt;sup>9</sup> 83 Fed. Reg. at 5325.



transitions the wood into a secondary product in a matter of days after pick-up from the utility. The uniform composition of utility poles and crossarms and the manner in which they are replaced will allow reclamation companies easily to track and collect decommissioned DCOI-treated wood from centralized locations from utility services.<sup>10</sup>

DCOI-treated wood after decommissioning will be in high demand for use as biofuel for its energy recovery value. In granting the petition to add other treated railroad ties (OTRT) to the categorical non-waste fuels list, EPA noted that non-hazardous secondary materials may have value in the marketplace and still be considered solid wastes.<sup>11</sup> Noting that while this value alone is not determinative, in this instance, the high quality of the utility poles and the analyses Viance conducted confirm that they have optimal fuel value, and the consistency and characteristics of a valuable fuel product, and will be managed as such immediately after decommissioning.

For example, Viance tested three samples of utility poles treated with DCOI. The heating values for these samples ranged from 9,538 to 10,006 Btu/lb. In comparison, clean wood has an average as-fired heating value of 5,150 Btu/lb, with a low as-fired heating value of 3,440 Btu/lb.<sup>12</sup> The heating value of processed CTRTs ranges from 6,000-8,000 Btu/lb as fired.<sup>13</sup> OTRTs added to the list of categorical non-waste fuels in 2018 ranged from a low of 5,232 Btu/lb to a high of 7,967 Btu/lb.<sup>14</sup> The heating value of DCOI-treated utility poles thus exceeds the heating value of CTRTs, OTRTs, and the traditional heating fuel, clean wood, that the poles replace. While utilities and downstream users have the option to send the decommissioned treated-wood products to a landfill or convert the wood into alternative secondary products, currently-

- <sup>11</sup> 83 Fed. Reg. at 5325.
- <sup>12</sup> 81 Fed. Reg. at 6726.
- <sup>13</sup> Id.
- <sup>14</sup> The heating values of processed OTRTs for materials added to the list of categorical nonwaste fuels were measured as the following:

6,867 Btu/lb for creosote-borate; 7,333 Btu/lb for copper naphthenate; 5,967 Btu/lb for copper naphthenate-borate; 5,232 Btu/lb for mixed railroad ties containing 56% creosote, 41% creosote-borate, 1% copper naphthenate, 2% copper naphthenate-borate; and 7,967 Btu/lb for mixed ties containing 25% creosote, 25% creosote borate, 25% copper naphthenate and 25% copper naphthenate-borate. 83 Fed. Reg. at 5325-26.

<sup>&</sup>lt;sup>10</sup> See Carol A. Clausen and Stan T. Lebow, 2011. Reuse and Disposal, 436. In: Jeffrey Morrell, et al., eds., Managing Treated Wood in Aquatic Environments. Forest Products Society.



listed categorical treated-wood products are frequently used as biofuels. Viance anticipates that downstream users will be further incentivized to use decommissioned DCOI-treated wood as a biofuel based upon its economic and environmental benefits.

Thus, Viance anticipates that DCOI-treated wood will be decommissioned and sent to energy generation facilities within a year of removal from service. The manner in which the poles will be collected and managed demonstrates that the material is managed as a valuable fuel that has not been initially disposed of, abandoned, or thrown away and therefore it has not been "discarded in the first instance."

#### VIII. DCOI-TREATED WOOD WILL BE SUFFICIENTLY PROCESSED INTO MATERIAL THAT IS LEGITIMATELY USED AS FUEL

DCOI-treated wood will be processed pursuant to 40 C.F.R. Section 241.3 into a non-waste product fuel that meets the legitimacy criteria. Under 40 C.F.R. Section 241.2:

*Processing* means any operations that transform discarded nonhazardous secondary material into a non-waste fuel or non-waste ingredient product. Processing includes, but is not limited to, operations necessary to: Remove or destroy contaminants; significantly improve the fuel characteristics of the material, e.g., sizing or drying the material in combination with other operations; chemically improve the as-fired energy content; or improve the ingredient characteristics. Minimal operations that result only in modifying the size of the material by shredding do not constitute processing for purposes of this definition.

When distribution poles are removed from service by the utility, the top half is generally removed first while the cables, conductor, lines, and attachments are transferred to a new pole. This top half of the pole is usually brought back to the utility's service center or pole yard. At some point (from hours to months), the bottom half of the pole will be removed and is generally, but not always, cut into smaller sections to enable easier handling. These are returned to the distribution facility or pole yard. These pieces may then be collected so that they can be collected by a reclamation company and converted into a secondary product or sent to an energy generation facility as biofuel. The utility or reclamation company will remove any remaining hardware attached to the decommissioned poles or crossarms, such as bolts and brackets.



In preparation for combustion as a biofuel, the processing of DCOI-treated utility poles, crossarms, and railroad ties is similar to the processing of CTRTs and OTRTs.<sup>15</sup> The reclamation company may have their own equipment to grind the wood into appropriately sized wood chips, or may sell the treated wood to a combustion facility directly that will grind the wood. Once sorted, DCOI-treated wood has a higher as-fired heating value than clean wood.

DCOI-treated wood can also be sorted and identified using X-ray fluorescence technology (XRF), which is commonly used by the wood treating industry to check the quality of a treatment. XRF can detect the presence of pentachlorophenol, chromium, copper, and arsenic in wood and can differentiate between types of treated wood.<sup>16</sup>

#### IX. DCOI-TREATED WOOD MEETS THE LEGITIMACY CRITERIA TO BE LISTED AS <u>A CATEGORICAL NON-WASTE FUEL</u>

DCOI-treated wood meets the legitimacy criteria under 40 C.F.R. Section 241.3(d) to be listed as a categorical non-waste fuel in 40 C.F.R. Section 241.4(a). DCOI-treated wood, including utility poles, crossarms, and railroad ties, is a valuable commodity. DCOI-treated wood has a meaningful heating value and is used as a fuel in combustion units to recover energy. Any contaminants in DCOI-treated wood are at levels comparable to or less than those in the traditional fuel the unit is designed to burn.

The legitimacy criteria set forth under 40 C.F.R. Section 241.3(d) requires the following: (1) materials that will be used as fuel in combustion units must be managed as a valuable commodity; (2) the material must have meaningful heating value and be used as fuel in a combustion unit that recovers energy; and (3) the levels of any contaminants in the material must be comparable in concentration to or lower than the levels in traditional fuels that the combustion unit is designed to burn. The comparable fuel may be any type that the particular unit can or does burn, whether the unit is permitted to burn the fuel or not. The contaminant levels can be compiled from national surveys and contaminant level data from the specific traditional fuel that the material will replace. The legitimacy criteria are in place to ensure that the fuel product is put towards a legitimate and beneficial use, and not simply discarded through combustion.<sup>17</sup> Even if the nonhazardous secondary material does not meet one or more of the legitimacy criteria, EPA can still propose to list a non-hazardous secondary material categorically by balancing the legitimacy criteria with other relevant factors under 40 C.F.R. Section 241.4(b)(5)(ii).

<sup>&</sup>lt;sup>15</sup> 83 Fed. Reg. at 5321-22; 81 Fed. Reg. at 6725.

<sup>&</sup>lt;sup>16</sup> See Clausen and Lebow at 437-38.

<sup>&</sup>lt;sup>17</sup> 81 Fed. Reg. at 6690.



A. DCOI-Treated Products Will Be Managed as a Valuable Commodity, as Storage Will Not Exceed a Reasonable Time Frame and Will Be Managed Similarly to Analogous Fuels

A non-hazardous secondary material is managed as a valuable commodity (1) if the storage of the material prior to use does not exceed reasonable time frames; (2) if the material is managed in a manner consistent with an analogous fuel; and (3) if there is no analogous fuel, the material is adequately contained to prevent releases.<sup>18</sup>

Viance's downstream customers, including utilities and reclamation companies, will not store DCOI-treated poles and crossarms in a manner that exceeds reasonable time frames. With respect to the time stored, EPA has stated that "the reasonable time frame" is "an appropriate standard considering the large number of non-hazardous secondary materials that may be subject to this rule, and is flexible enough to allow accumulation of these materials to be cost effective."<sup>19</sup> Utility poles are generally generated continuously, as repairs and replacements are made by utilities and governments. The use and storage thus is predictable and can be kept consistent. The stored poles will be rotated in the same manner as comparable fuels.

DCOI-treated railroad ties will be managed as valuable commodities. DCOI-treated railroad ties would be processed and shipped to combustors in a similar manner to CTRTs and OTRTs: the railroad company removes the old railroad ties from service, where non-combustible material is sorted and then shipped by truck or rail, similar to the delivery of traditional biomass fuels, to a reprocessing center. The pieces are further processed until they meet end-use specifications and are sold to an end-use combustor for energy recovery. The end-use combustor may further screen the materials or combine them with other biomass fuels. The process for managing CTRTs and OTRTs does not exceed reasonable time frames. DCOI-treated railroad ties upon decommissioning will be handled similarly to both CTRTs and OTRTs.<sup>20</sup>

DCOI-treated utility poles and crossarms will be handled in a manner consistent with analogous fuels such as biomass and coal, as are CTRTs and OTRTs.<sup>21</sup> Utility companies will store decommissioned DCOI-treated wood onsite until it is sold to a reclamation company, which occurs in a matter of months. A downstream reclamation company will cut or chip the decommissioned poles to proper size that ensure they work with the boiler fuel feeder in the boilers, similar to an analogous fuel. As with biomass and coal, downstream reclamation

<sup>21</sup> See 81 Fed. Reg. at 6726; 83 Fed. Reg. at 5325.

<sup>&</sup>lt;sup>18</sup> 83 Fed. Reg. at 5325.

<sup>&</sup>lt;sup>19</sup> Identification of Non-Hazardous Secondary Materials That Are Solid Waste, 76 Fed. Reg. 15455, 15520 (Mar. 21, 2011) (codified at 40 C.F.R. Part 241).

<sup>&</sup>lt;sup>20</sup> 81 Fed. Reg. at 6726; 83 Fed. Reg. at 5325.



companies will ensure that the poles are not contaminated with other material, and can sort DCOItreated wood using XRF technology. The poles and crossarms would be transported to the boilers and co-generation facilities in the same manner as traditional fuel. A downstream reclamation company would have monetary incentives to maintain the quality of the poles and crossarms to help ensure that their quality as a fuel is maintained and the material is recognized as a valuable commodity, in addition to reducing the overall fuel costs.

### B. DCOI-Treated Wood Has a Meaningful Heating Value That Exceeds EPA's As-Fired Benchmark and Will Be Used as Fuel to Recover Energy

The second legitimacy criterion under the regulation is that the non-hazardous secondary material must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy. In the preamble to the non-hazardous secondary material rule, dated February 7, 2013, EPA stated a heating value benchmark of 5,000 Btu/lb. as fired (which includes moisture) to define a presumptive meaningful heating value.<sup>22</sup> In support of this petition, Viance tested three samples of utility poles treated with DCOI. The heating values for these samples ranged from 9,389 to 10,060 Btu/lb as received and 10,596 to 11,086 Btu/lb moisture free. These range values are far greater than EPA's benchmark of 5,000 Btu/lb. Viance thus has demonstrated that the utility poles have a meaningful heating value and are used as a fuel to recover energy, and are not discarded for the purposes of this criterion.

### C. DCOI-Treated Wood's Contaminant Levels Are Comparable to or Lower Than Traditional Fuels Such as Wood, Biomass, and Coal

Regarding the third criterion, appended are data prepared by an independent laboratory, ALS Environmental, indicating that the DCOI-treated wood contains contaminants or groups of contaminants at levels that are comparable to or lower than those in traditional fuel(s) (wood and coal) that the unit is designed to burn. These data prove that treated utility poles and crossarms are comparable to railroad ties that were the subject of the Treated Wood Council's 2015 submission to EPA that resulted in EPA classifying those ties as non-hazardous secondary material.<sup>23</sup> When comparing these data to the values of traditional fuels such as wood/biomass and coal<sup>24</sup> and reviewing the comparison table that is attached to this document on pages 6 and 7, EPA will find this third criterion is satisfied. As stated in 40 C.F.R. Section 241.3(d)(1)(iii), "[i]n determining which traditional fuel(s) a unit is designed to burn, persons may choose a traditional

See Non-Hazardous Secondary Materials That Are Solid Waste, 78 Fed. Reg. 9111, 9172 (Feb. 7, 2013) (codified at 40 C.F.R. Part 241).

<sup>&</sup>lt;sup>23</sup> 83 Fed. Reg. at 5326-33.

<sup>&</sup>lt;sup>24</sup> See U.S. EPA, Contaminant Concentrations in Traditional Fuels: Tables for Comparison (Nov. 29, 2011), available at <u>https://www.epa.gov/rcra/contaminant-concentrations-traditional-fuels-tables-comparison</u>.



fuel that can be or is burned in the particular type of combustion unit." Viance is confident that EPA will find the data presented in the appended laboratory report demonstrate that Viance's DCOI-treated wood, including utility poles and crossarms, meets the legitimacy criteria for contaminant levels, as it contains contaminants or groups of contaminants at levels comparable in concentration to or lower than those contained in wood/biomass and coal and other traditional fuels.

The chemical constituents of the DCOI-treated wood were analyzed and are presented in the appended laboratory report. The data demonstrate that all levels of elemental metals, non-metal elements (chlorine, fluorine, nitrogen, mercury, and sulfur), and hazardous air pollutants were below or comparable to the levels for traditional fuels. The data demonstrate that the non-hazardous secondary material thus satisfies the requirements in 40 C.F.R. Section 241.3(c)(1)(ii).

#### X. BALANCING THE LEGITIMACY CRITERIA AND OTHER RELEVANT FACTORS, DCOI-TREATED WOOD MEETS THE REQUIREMENTS FOR A NON-WASTE DETERMINATION PURSUANT TO 40 C.F.R. PART 241

Viance submits that DCOI-treated wood, including utility poles, crossarms, and railroad ties, meets the regulatory criteria necessary to be considered a non-waste fuel pursuant to 40 C.F.R. Part 241, and thus does not require a case-by-case determination that the wood meets the legitimacy criteria. In balancing the legitimacy criteria, EPA must apply the same weight of the evidence analysis to the treatment of categorical non-waste listing for wood preservatives such as creosote, copper naphthenate, and borate in the treatment of railroad ties. DCOI-treated wood will be transitioned from use and will be processed in the same manner as these CTRTs and OTRTs for which EPA has granted a non-waste determination following a rulemaking petition.

The ability to transition treated-wood products to a secondary use as biofuel is an important consideration in deciding among treated-wood products. The use of DCOI-treated wood as fuel will contribute to emissions reductions and resource conservation efforts. Secondary use of treated wood as fuel reduces demand upon scarce landfill space and the negative environmental impacts of landfills such as methane gas emissions.<sup>25</sup> The use of non-hazardous secondary materials "that have meaningful heating value that are used as non-waste fuels in combustion units provide a useful contribution and are valuable products since they are replacing traditional fuels that otherwise would have to be burned."<sup>26</sup>

DCOI-treated wood, in addition to following similar processes to CTRTs and OTRTs, importantly has a lesser environmental impact and higher heating value than these

<sup>&</sup>lt;sup>25</sup> See Clausen and Lebow at 438-39. 76 Fed. Reg. at 15467.

<sup>&</sup>lt;sup>26</sup> 76 Fed. Reg. at 15542.



materials. In consideration of these factors, Viance respectfully requests that EPA grant its petition for a non-waste determination for DCOI-treated wood.

#### CONCLUSION

For the foregoing reasons, Viance respectfully requests that EPA grant a non-waste determination for wood treated with DCOI as a category under 40 C.F.R. Section 241.4(a).

Thank you for your consideration.

Sincerely, RE

Kevin Archer, Ph.D. Director, Research & Development

Attachment