

Supply Base Report for Enviva Pellets Ahoskie, LLC

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Version 1.2 June 2016

NOTE:

This template, v1.2, is effective as of the date of publication, that is, 23 June 2016. Template v1.1 may still be used for those audits undertaken prior to 23 June 2016 and where the certificate is issued to Certificate Holders before 1 October 2016.

For further information on the SBP Framework and to view the full set of documentation see www.sustainablebiomasspartnership.org

Document history

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1 Company Overview

Producer name: Enviva Holdings LP

Producer location: 7200 Wisconsin Ave Suite 1000 Bethesda, MD 20814

Geographic position: Enviva Pellets Ahoskie, LLC
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Date report finalised: 12/09/2017

Close of last CB audit: September 22, 2016 Garysburg, NC USA

Name of CB: SCS Global Services

Translations from English: NA

SBP Standard(s) used: Standard 1 version 1.0, Standard 2 version 1.0, Standard 4 version 1.0 and Standard 5 version 1.0

Weblink to Standard(s) used: <http://www.sustainablebiomasspartnership.org/documents>

SBP Endorsed Regional Risk Assessment: NA

Weblink to Supply Base Evaluation (SBE) on Company website:
<http://www.envivabiomass.com/sustainability>

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

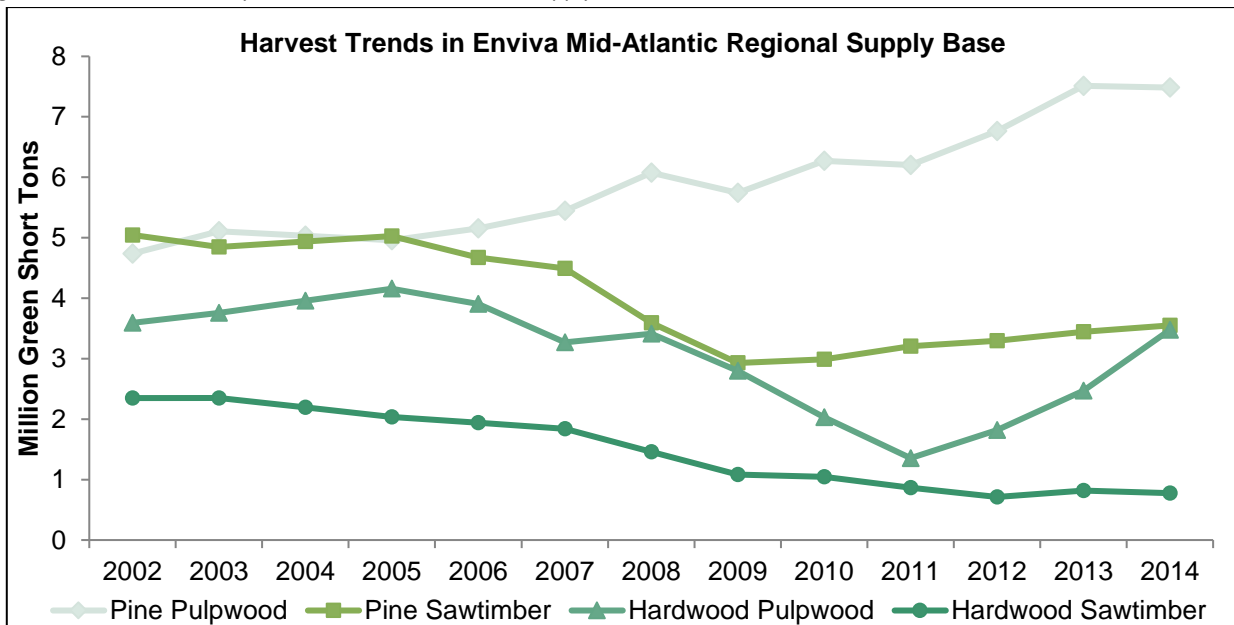
2 Description of the Supply Base

2.1 General Description

Enviva, Holdings LP (Enviva) operates 3 mills in its mid-Atlantic region: Enviva Pellets Southampton, VA, Enviva Pellets Northampton, NC and Enviva Pellets Ahoskie, NC. Enviva treats the supply regions for each mill as one large supply area, with the potential for each mill to obtain wood from any portion of the area. The mid-Atlantic regional supply base includes portions of the states of North Carolina Virginia and, portions of South Carolina. Hardwoods are the pre-dominate species group making up 70% of the forested hectares.

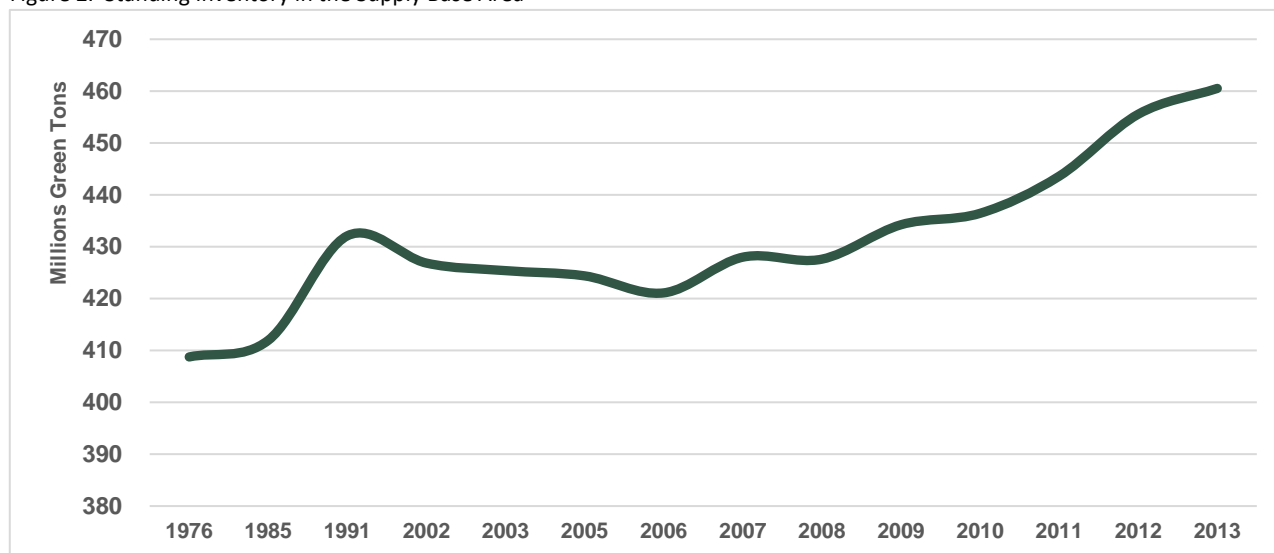
Figure 1 displays historic harvest volumes by product in the supply base, according to Forest2Market’s comprehensive database (Forest2Market Inc., 2015). The graph shows the decline in demand for hardwood pulpwood from 2006-2011, and then the subsequent demand recovery from 2011-2014 as Enviva established in the region. Hardwood pulpwood consumption has increased in recent years, but total 2014 demand was 0.7 million tons less than the high of 4.2 million tons removed in 2005; therefore total basin demand for hardwood pulpwood with Enviva operating in the region is below the recent historic highs. Moreover, the most recently available inventory data from the US Forest Service’s Forest Inventory and Analysis program shows that the growth to drain ratio for hardwood in our Supply Base Area is 2.41:1, meaning that net hardwood inventories are increasing and current harvest levels for this product are sustainable. The growth to drain ratio for pine in the region is 1.86:1 (US Department of Agriculture Forest Service, 2017). Enviva’s sourcing does not compete with other forest product industries: instead, it provides a market for low value forest products produced during harvests for high-value timber.

Figure 1. Harvest Trends by Product in the Mid-Atlantic Supply Base Area



The positive growth: drain dynamics in the regions forest standing stock has increased steadily since 1976 at an annualized rate of 0.26% (see Figure 3) (US Department of Agriculture Forest Service, 2017).

Figure 2. Standing Inventory in the Supply Base Area



Based on the most recently available inventory data from the US Forest Service’s Forest Inventory and Analysis program, the combined hardwood and pine growth: drain ratio is 2.09:1. Due to the potential volume of sawtimber removals, the region also could generate up to 2.3 million green metric tons of forest residuals available for pellet production (US Department of Agriculture Forest Service, 2017). Further, sawtimber users in the area generate about 1.8 million dry tons of mill residuals per year (US Department of Agriculture Forest Service, 2014).

Operating Scale

Enviva is just one of several industries and entities sourcing wood in its supply base area. According to Forest2Market’s database and Enviva’s wood delivery database, Enviva’s three mill in the mid-Atlantic region source about 15% of the total wood harvested in its supply base area, all while regional annual inventory growth exceeded the volume harvested. In the region, pine pulpwood is the only product for which demand has increased (4.0% annually) (Forest2Market Inc., 2015). Only 18% of Enviva’s pellet feedstock in this region is made up of pine, while 82% of wood used is hardwood. At the Ahoskie mill specifically, 30% of the feedstock is made up of pine and 70% is made up of hardwood.

CITES, IUCN Species

The International Union for the Conservation of Nature (IUCN) Red List of Threatened Species includes *Pinus palustris* (Longleaf pine) which does occur in the supply base region (The IUCN Red List of Threatened Species, 2015). Longleaf pine is included in the IUCN list because its current extent is much reduced from its historical dominance in the southeast US. However, conservation groups, such as the Longleaf Alliance, agree that creating commercial viability of longleaf pine is crucial to its restoration. Enviva’s use of material from longleaf stand thinnings or other harvest residuals supports its commercial viability and encourages landowners to restore longleaf stands. Enviva will not procure wood from natural longleaf stands if they are going to be converted to non-forest or another forest type.

Further, Enviva maintains a third party audited Controlled Wood Risk Assessment which satisfies the Forest Stewardship Council™ (FSC), Programme for the Endorsement of Forest Certification™ (PEFC) and Sustainable Forestry Initiative® (SFI®) Chain of Custody requirements. These certifications address the controls needed to avoid the use of CITES and/ or IUCN species concerns. None of the species used for wood pellets appear in the Convention on International Trade in Endangered Species (CITES) Appendices (CITES, 2015).

General Forest Management Techniques

Forestry practices in the mid-Atlantic region can vary greatly due to landowner demographics and forest types. There are financial and tax incentives available to forest landowners to encourage management, replanting, and riparian zone buffer incentives (Virginia Department of Forestry, 2015) (North Carolina Department of Agriculture and Consumer Services, 2015), (South Carolina Forestry Commissions, 2018).

Typically, hardwood management relies on natural regeneration of stands where forest tracts are harvested and the natural processes of seedling establishment and sprout growth from the remaining stumps (called “coppice”) produce the next forest.

Forest management in bottomland/ wetland hardwood systems

The majority of bottomland hardwood forest stands in the mid-Atlantic region have been harvested for sawtimber production for centuries. In terms of harvest techniques, as explained by the North Carolina Forest Service in its paper entitled *Managing and Regenerating Timber in Bottomland Swamps* (July 2012), “Implementing a carefully planned and executed swamp timber harvest in a manner that minimizes soil and water impacts has shown to be the practical and viable prescription for forest management in bottomland/cypress swamps.” In some instances select cuts may be used for bottomland harvest, however clearcut harvest is the typical management method used in bottomland systems, as “nearly all swamp-adapted tree species require full sunlight to adequately regenerate, thus demanding a removal of the shading overstory” (North Carolina Forest Service, 2012). This harvest technique maximizes the likelihood of regeneration of desirable species post-harvest. Many of these existing bottomland hardwood stands have been poorly managed to date, such that appropriate silvicultural treatments such as clearcut embody restoration for these forests and are the best ecological outcome. For more information on bottomland hardwood forests and their silviculture, please see the excellent guide published by The Forest Guild, at <http://www.forestguild.org/node/263>.

Numerous state and Federal water quality regulations also govern forestry activities in swamps and wetlands. For example, the North Carolina and Virginia Department of Forestry describes several forest management guidelines that should be followed when harvesting in bottomland systems. In addition to following best management practices (BMPs) for wetlands as described by the Department of Forestry in these forest types, streamside management zones (SMZs) are always established according to state guidelines. SMZ's are intended to protect water quality, to provide a visual screen, to enhance wildlife/ bird corridors and to provide an additional source of tree seed to enhance regeneration (North Carolina Forest

Service, 2012). Enviva audits its suppliers’ performance relative to state and Federal regulations and best management practices.

Forest management in pine systems

Pine plantations are managed under various regimes with the following typical management regime: planting, five years release spray, 15 year thinning and generally a final harvest between years 35 and 40. Other pine stands may be released after 5 years and left to grow as a mixed pine/ hardwood stand. Many pine stands are re-planted and are not intensively managed thereafter, which permits the growth of hardwood tree species within the stand, creating a mixed pine and hardwood forest.

Ownership, Land Use and Certification

The land ownership patterns in the Enviva mid-Atlantic supply base area are typical for the southern United States: approximately 84% of the forestland is privately held. Federal ownerships total 11% and state or local ownership are 5% of the forested hectares. As listed in Table 1, an estimated 54% of the regions total land area is forested, 22% is in agriculture, 10% is developed and 8% is wetlands. These four categories comprise the 94 of the land cover (United States Department of the Interior Geological Survey, 2015).

Table 1. Land Cover in the Enviva Primary Fiber Sourcing Area

Cover/Land use	% of Supply Area
Water	2.2%
Developed	10.1%
Mechanically disturbed	3.3%
Mining	0.1%
Naturally barren	0.0%
Forest	54.5%
Grassland/ Shrubland	0.1%
Agriculture	21.8%
Wetlands	7.8%
Non-mechanically dsturbed	0.0%

Major forest certification schemes such as the American Tree Farm System® (ATFS), SFI, and FSC, have program participants in the supply area. The FSC website indicates the program participants have certified 300,500 ha in the three states included in the supply base area. The SFI and ATFS Programs combined are nearly 2 million hectares in the three states. Companies in the supply base area active in certification are listed in Table 2.

Table 2. Companies Active in SFI or FSC in the Enviva Supply Area

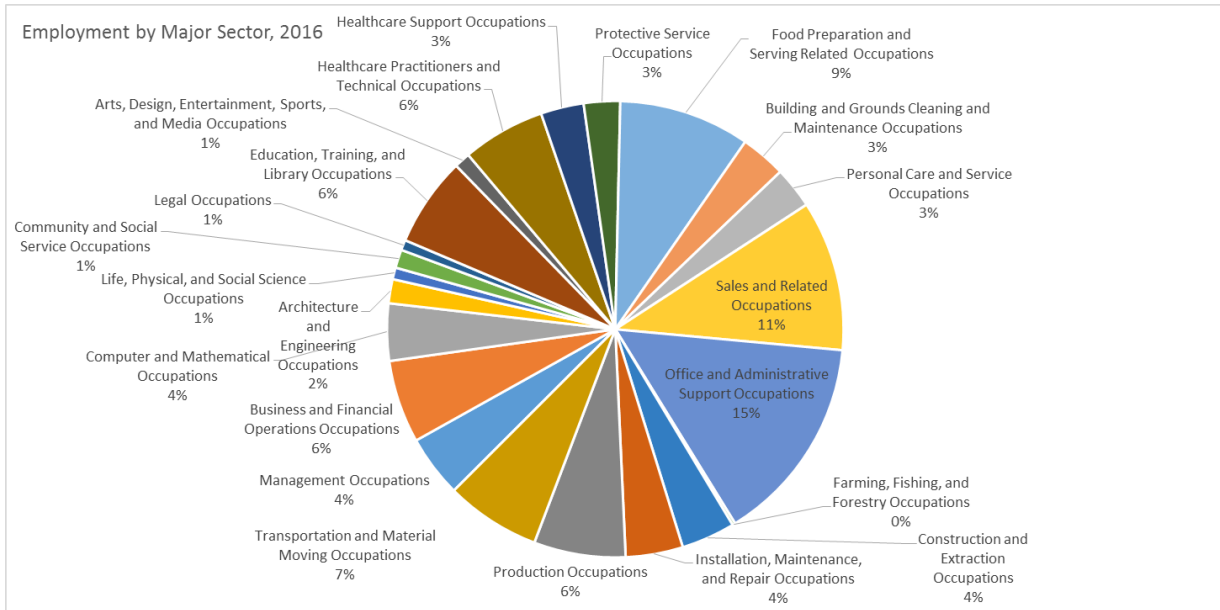
360 Forest Products, Inc.	Duke University	Mid Carolina Timber Company, Inc	Sonoco Products Company
Campbell Global, LLC - East & SE Regions	Forest Investment Associates	The Molpus Woodlands Group, LLC	South Carolina Forestry Commission
Certified Forest Management, LLC	GreenLink Forest Resources, LLC	Plum Creek Timber Company, Inc	Westervelt
Conservation Forestry, LLC	Hancock Natural Resource Group	Resource Management Services, LLC	Weyerhaeuser NR Company
The Conservation Fund	Johnson Company, Inc.	S & M Forest Management Group	Timberland Investment Resources, LLC

Crawley Timber Co	Kingstree Forest Products, Inc	SR Jones Jr Land & Timber	
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Regional Socio-economic Conditions

Regional employment is graphed below and provides a snapshot of the social mixture of the region. Farming, fishing and forestry make up 0.2% of the total employment in the region. However, due to the nature of pellet production, it also supports other sectors such as transportation & material moving, production, installation, maintenance and repair, business and financial operations and office and administration occupations, which in total make up an additional 40% of the labor force. The mean income for the region is \$51,174 and mean income for the employment sector including Forestry is \$29,990 (United States Department of Labor, 2016). Mean income for an average mill worker in the region is \$34,255 (United States Department of Labor, 2016). Enviva employs directly approximately 350 people in the region. Further, Enviva’s operations supports an additional 170 various harvesting crews and saw mills, along with forest managers, feedstock and pellet transport. Local contractors are used in maintaining the mills, providing hundreds of spin-off jobs. Figure 3 illustrates employments by the major industrial groups for the two states included in the supply region (United States Department of Labor, 2016).

Figure 3. North Carolina and Virginia Employment by Major Sector



According to a report created for Enviva by Chmura Economics & Analytics, the total annual economic impact (direct, indirect, and induced impacts) of the ongoing operation of the Ahoskie wood pellet manufacturing plant in North Carolina is estimated to be \$114.4 million (measured in 2013 dollars) which supports 222 state jobs. Aside from the direct impact, an additional indirect impact of \$46.4 million and 115 jobs will benefit other North Carolina businesses that support the plant’s operation, including local logging and trucking companies. The economic impact of the plant in Virginia is smaller, derived entirely from the indirect and induced impact. The indirect impact in Virginia is estimated to be \$12.4 million and 22 jobs per year in 2013, which benefits other Virginia businesses that support the plant’s operation, including local logging and trucking companies (Chmura Economics & Analytics, 2013).

Pellet Feedstock Profile

Primary feedstock is sourced direct from the forest in the form of round wood or chips from 120+/- suppliers, all of whom are vetted and qualified prior to delivering. All suppliers must sign a contract with Enviva before wood can be delivered to an Enviva mill. The contract requires suppliers to use trained loggers during harvest, follow best management practices for water quality, and to avoid controversial sources of wood, such as illegal logging. Enviva foresters confirm trained logger status and ensures that loggers delivering wood maintain their continuing education as required. All suppliers and loggers must adhere to posted safety requirements while on Enviva property.

Primary feedstock from forest residues, such as tree tops, limbs, deformed and low grade trees, and any other wood produced during harvest that is otherwise unacceptable to other wood users in the area is delivered to an Enviva mill as woodchips. A single load of roundwood from the same harvest can contain tops, limbs, and/or small diameter or malformed understory trees that cannot be distinguished from one another through visual inspection. Enviva does not use sawlogs in the production of pellets, nor do we use any construction debris, treated wood, or post-consumer material.

Enviva also sources secondary feedstock from a variety of sawmill and wood industry suppliers. Sawmills source high-quality logs from the forest and mill them into products like two-by-fours. Wood industry suppliers use the products created by sawmills to produce products such as furniture or other assembled wood products. These feedstocks are most commonly in the form of sawdust or shavings and may be green or kiln-dried.

At the Northampton plant, the pellet feedstocks have the following characteristics:

- Primary Feedstock (roundwood and forest residues direct from the forest) comprise 75.8% of the feedstock, all are SBP-compliant Primary Feedstock and 9.1% of the volume is from certified sources.
- Secondary Feedstock (sawmill and wood industry residues) are 24.2% of the feedstock supplied by 50+/- mills, are a combination of SBP-Controlled Secondary Feedstock and SBP-Compliant Secondary Feedstock and 27.2% is from certified sources.
- Hardwoods make up 67.3% of the feedstock and softwood species are the remaining 32.7%.

Enviva's three mid-Atlantic mills received feedstocks from the following sources, by volume:

- 15.1% was made up of residues supplied by sawmills and wood industries.
- 52.4% was made up of hardwood and pine chips and roundwood from mixed oak-pine forests. These forests are managed for the production of pine sawtimber at low-intensities and contain a mixture of hardwood and pine trees. These forests are either planted in pine or naturally seeded from adjacent stands or seed trees, and little to no fertilizers or herbicides are applied to them throughout their life cycle. This establishes an overstory of straight, large-diameter pine trees with an understory of crooked, small-diameter hardwood trees that cannot be made into solid wood products.
- 22.4% was made up of hardwood and pine chips and roundwood from southern yellow pine forests. These are forests that were planted in pine and either managed moderately with minimal effort to prevent hardwood trees from growing in the understory, or more intensively to suppress

significant understory growth, thereby increasing the forest's growth rate and yield. These forests are generally thinned 1-2 times throughout their growth cycle, meaning that certain trees are removed to reduce density in the forest and create additional room for the remaining trees to grow to sawtimber size and quality. These thinned trees are sold to low-grade consumers like Enviva.

- 5.5% was made up of hardwood and pine chips and roundwood from upland hardwood forests. These are low-intensity managed hardwood forests that are naturally seeded with an overstory of large-diameter oak, poplar, and hickory hardwood trees and a significant understory of small-diameter maple, oak, and sweetgum hardwood trees.
- 4.6% was made up of hardwood and pine chips and roundwood from bottomland hardwood forests. These are very low-intensity managed hardwood forests that are located in lowland areas and floodplains along rivers or other water bodies and which have soils that are saturated or flooded for at least part of the year. These forests contain overstories of large-diameter oak, gum, and cypress trees that originate from seedlings and sprouts arising out of stumps from previously harvested trees and a significant understory of small-diameter hardwood trees. When the landowner decides to harvest, the forest is clearcut and the stems of the large-diameter hardwood trees are sold to hardwood sawmills or furniture manufacturers, while the small diameter understory hardwood trees and tops and branches of sawtimber trees are sent to lower grade consumers like Enviva.

Enviva's Commitment to Responsible Wood Sourcing

Track & Trace

Enviva has implemented management systems to ensure that the wood used to make wood pellets meets our strict sustainability requirements. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. First, Enviva uses our SFI Fiber Sourcing verifiable monitoring program as a basis for monitoring tract harvests. In addition, we maintain a third-party audited Track & Trace database which includes information at the tract level, including data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the Ahsokie mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.

The Track & Trace data collection is supported by tract audits performed by Enviva foresters. During tract audits, Enviva foresters validate data on the tract characteristics in addition to ensuring that best management practices (BMPs) for water quality are properly implemented, special sites are properly protected, and loggers are trained, along with other metrics for responsible harvesting. In the mid-Atlantic region, Enviva only accepts wood from tracts in which the logger has completed and maintains training through a SFI-approved trained logger program. Enviva's Track & Trace data collection process indicates that Enviva receives 37% of its incoming primary material from final fellings that are typically managed in rotations ≥ 40 years old. If any of these monitoring programs uncover issues with incoming raw material, Enviva will contact suppliers to notify them of the issue. If needed, Enviva will cease accepting deliveries

from a supplier who does not perform to our sustainability standards. Enviva will not accept further deliveries from a poorly performing supplier until the supplier demonstrates the ability to adhere to Enviva's sustainability requirements.

Identifying and protecting High Conservation Value (HCV) Areas: Partnership with the US Endowment, Enviva's tract approval process, and the Enviva Forest Conservation Fund

In 2016 Enviva and The US Endowment for Forestry and Communities evaluated the mid-Atlantic catchment area to identify forest types with potentially high conservation value. After consulting with leading independent academics and environmental organizations, the Endowment identified four specific bottomland priority forest types; Cypress-tupelo swamps, Atlantic white cedar stands, Pocosins and Carolina bays. See the Enviva Forest Conservation Fund website (<http://envivaforestfund.org/about-the-enviva-forest-conservation-fund/about-bottomland-forests/>) for additional information about these bottomland forest types. Enviva has committed not to source from high conservation value areas that might fall into one of these four categories.

While gathering Track & Trace data on specific tracts prior to purchase, Enviva's Foresters must evaluate whether there is a risk that the tract might be considered HCV. This assessment is conducted on a site-by-site basis in order to evaluate the condition of the stand and to maximize the likelihood of regeneration of desirable species post-harvest. In this region, the most common priority forest type is cypress-tupelo. While all of these four priority types are bottomland hardwood systems, it is important to note that not all bottomland hardwoods have high conservation value, and in fact, the majority of them are working forests that have been managed as timberlands for centuries (North Carolina Forest Service, 2012). 84% of the forests in our mid-Atlantic wood supply base are privately owned, meaning that their owners have considerable freedom in choosing how to manage these lands. Markets for timber from working bottomland hardwoods provide an important incentive for landowners to maintain their forests as forests.

There is no general consensus, at a site by site level, of what makes a bottomland hardwood stand also a HCV. For example, the Draft US FSC National Risk Assessment defines HCV bottomland hardwood stands as those that are 80 years or older and have the structure and composition of old-growth stands. However, FSC does not physically designate where those forests are found. Other groups may have their own descriptions of precisely what constitutes a HCV bottomland forest, based on their own organizational goals. Some are long-term focused and are interested in ensuring that bottomland hardwood forests are connected on the landscape and are still thriving in light of climate change. Others feel that all bottomland hardwood forests are inherently HCV and should be protected. Because a general consensus does not exist and we do know that most of these forests are appropriately categorized as working forests, Enviva developed its own set of site specific characteristics that can help us to determine in a granular fashion, at the site by site level, whether certain stand is actually a HCV tract.

Overall, when deciding whether to purchase primary feedstock from a given tract, Enviva's goal is to determine whether that tract will, if harvested, produce a new tract with the same desirable species content that was present before harvest. Indicators that should be considered in this decision include forest type (i.e. whether it is likely one of the four priority forest types), location, species composition,

hydrology and water flow, stand age and soil saturation. When assessing a tract for HCVs, Enviva evaluates all of these important characteristics. If there is evidence based on this first level of evaluation that the site may be an HCV bottomland, then the Forester must perform a second level review which includes an on-site assessment, data collection and documentation prior to purchase. At the landscape scale, we endeavor to contribute to a working forest landscape with a diversity of age classes representing bottomland hardwood assemblages which can, over the long and short term, provide wildlife habitat, recreation, buffers for climate change, and other ecosystem services, while still playing a pivotal role in conservation and working forests in the mid-Atlantic supply base area.

While Enviva does not source from areas that might be deemed too ecologically sensitive, because we work in landscapes that are nearly all privately owned with many forest products industry actors, we cannot guarantee that the areas that we do not source will remain intact. In order to ensure that these special places can remain so, Enviva created the Enviva Forest Conservation Fund (<http://envivaforestfund.org/>) to work toward protecting and conserving working forest landscapes in ecologically sensitive bottomland hardwood ecosystems. Enviva has committed five million dollars over a ten-year period to fund conservation efforts targeting these forest types. The fund is administered by the US Endowment for Forestry and Communities and the first round of grant awards, protecting more than 2000 acres of bottomland hardwood forests in NC and VA, were awarded in May 2016.

Stakeholder engagement on Bottomland/ Wetland Hardwood Forest Management

Recognizing that the stakeholder community overall has substantial work to do to identify what specifically constitutes HCV, and to understand best practices in bottomland/ wetland hardwood systems, Enviva and the US Endowment co-convened a Bottomland/ Wetland Blue Ribbon Panel stakeholder group in May 2016 to work toward developing a system of best management practices for these priority forest types. More than 45 stakeholders representing academic, NGO, government, and industry groups spent 2.5 days together discussing the state of the art around forest management in bottomland/ wetland hardwood ecosystems. Enviva released the workshop report from this effort to the public, and will continue to engage this stakeholder group in review and evaluation of our sourcing practices going forward. Enviva formed a Bottomland Hardwood Task Group to continue its work evaluating bottomland hardwood forests and forest management practices. The report can be found at <http://www.envivabiomass.com/sustainability/healthy-forests/blue-ribbon-panel/>

Minimizing risk from Secondary Feedstock

Enviva purchases sawmill and wood industry residues in the form of sawdust, shavings, or other waste products from the milling process (Figure 4). Secondary feedstock suppliers receive an initial visit prior to beginning deliveries, to verify their operations and products. All sawmill and wood industry suppliers are required to complete a Residual Supplier Reporting Form, providing Enviva with information on the source of their wood as well as any certifications and species used. Enviva includes their supply areas in our supply base evaluation and provides each supplier with feedback on their supply area, noting any areas of risk that may be present. Enviva may choose to cease deliveries from a supplier which refuses to provide the

necessary data for us to properly include their supply area in our risk assessment. Enviva contacts each sawmill and wood industry supplier annually to ensure their data are accurate.

2.2 Actions taken to promote certification amongst feedstock supplier

Enviva is third party certified in the three major chain of custody systems (FSC, PEFC & SFI). Enviva also maintains certification under the SFI Fiber Sourcing Program. SFI Fiber Sourcing requires Enviva to promote responsible forestry activities and certification to our suppliers. Our staff are actively involved in the SFI Implementation Committees which are groups of SFI companies that work together to elevate forestry operations on-the-ground.

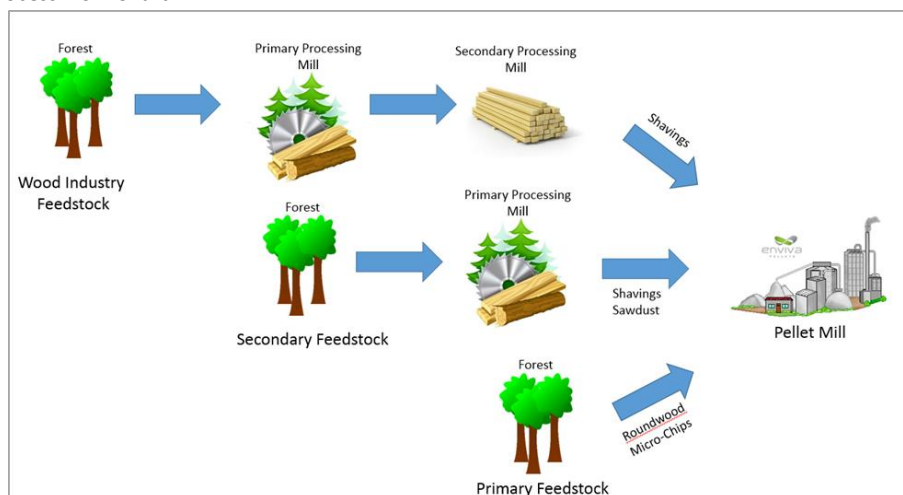
Enviva actively pursues feedstock from certified sources to encourage those landowners to maintain and expand their certified holdings. Enviva also financially supports the American Tree Farm System and has an Independent Management Group under ATFS which was created in 2015. We have staff devoted to working with landowners to recruit them either into our group or the state program, by assisting them with writing management plans and preparing for audits.

2.3 Final harvest sampling programme

Enviva’s Track & Trace data show that currently about 37% of the volume purchased is from forest types that are typically managed on a 40 year or longer rotation.

2.4 Flow diagram of feedstock inputs showing feedstock type

Figure 4. Typical Process Flow Chart



2.5 Quantification of the Supply Base

Supply Base (data sources; a, b & c (US Department of Agriculture Forest Service, 2014))

- a. Total Supply Base area (ha): 15.9 million hectares
- b. Tenure by type in the entire supply region(ha):

Ownership Type	Millions /ha
Private	13.4
Federal	1.8
State/local	0.7

c. Forest by type in the entire supply region (ha):

Major Forest Type Groups	ha
White / red / jack pine group (100)	114,507
Spruce / fir group (120)	12,882
Longleaf / slash pine group (140)	203,000
Loblolly / shortleaf pine group (160)	4,335,313
Other eastern softwoods group (170)	52,533
Exotic softwoods group (380)	1,145
Oak / pine group (400)	1,905,021
Oak / hickory group (500)	7,238,660
Oak / gum / cypress group (600)	1,176,817
Elm / ash / cottonwood group (700)	473,188
Maple / beech / birch group (800)	192,866
Aspen / birch group (900)	5,499
Other hardwoods group (960)	82,296
Exotic hardwoods group (990)	22,621
Nonstocked (999)	128,136
Total	15,944,484

d. Forest by management type in the entire supply region (ha):

- Hardwoods comprise 73% of the forested hectares. These forests are typically naturally managed.
- The remaining 27% of forests are softwood. Overall, although many pine stands are “planted” they are not intensively managed plantations with little or no understory; instead, once established they are left to grow and routinely have a hardwood dominated understory. Therefore, it is difficult to determine the exact percentage of true plantations in the region.

e. Certified forest by scheme (ha): Primary supply area (e.g. hectares of FSC or PEFC-certified forest)

- SFI: 1,067,958 ha
- FSC: 300,569 ha
- ATFS: 885,257 ha

Feedstock

f. Total volume of Feedstock: 706,675 metric tonnes

g. Volume of primary feedstock: 535,704 metric tonnes

h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes:

- Forest Stewardship Council: 1.5%
- Program for the Endorsement of Forest Certification: 7.6%
- Not certified to an SBP-approved Forest Management Scheme: 90.9%

i. List all species in primary feedstock, including scientific name

Common name	Scientific name
American beech	Fagus grandifolia
American elm	Ulmus americana
Atlantic white cedar	Chamaecyparis thyoides
Black cherry	Prunus serotina
Black gum	nyssa sylvatica
Black jack oak	Quercus marilandica
Black oak	Quercus velutina
Black walnut	Juglans nigra
Cherry bark oak	Qurecus pagoda
Chinkapin oak	Qurecus muehlenbergii
Green ash	Fraxinus pennsylvanica
Hackberry	Celtis occidentalis
Hickory	Carya spp.
Holly	Ilex opaca
Laurel oak	Quercus laurifolia

Common name	Scientific name
Live oak	Quercus virginiana
Loblolly pine	Pinus taeda
Longleaf pine	Pinus palustris
Northern red oak	Quercus rubra
Overcup oak	Quercus lyrata
Pecan	Cayra illinoensis
Persimmon	Diospyros virginiana
Pond pine	Pinus serotina
Post oak	Quercus stellata
Red maple	Acer rubrum
River birch	Betula nigra
River oak	Casuarina cunninghamiana
Shortleaf pine	Pinus echinata
Shumard oak	Quercus shumardii

Common name	Scientific name
Slash pine	Pinus elliottii
Souther red oak	Quercus falcata
Sugar maple	Acer saccharum
Swamp chestnut oak	Quercus michauxii
Sweet gum	Luquidambar styraciflua
Sycamore	Plantanus occidentalis
Virginia pine	Pinus virginiana
Water oak	Qurecus nigra
Water tupelo	Nyssa aquatica
White ash	Fraxinus americana
White gum	Eucalyptus wandoo
White oak	Quercus alba
Willow oak	Quercus phellos
Winged elm	Ulmus alata
Yellow poplar	Liridendron tulipifera

- j. Volume of primary feedstock from primary forest: 0.0 metric tonnes
- k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes:
 - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: 0.0
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: 0.0
- l. Volume of secondary feedstock: 24.2% of the total sourced delivered as chips and dust or pine chips, dust or shavings. The feedstock is delivered from within the defined supply base as mapped in section 2.1.
- m. Volume of tertiary feedstock: 0.0%

3 Requirement for a Supply Base Evaluation (SBE)

SBE completed	SBE not completed
X	<input type="checkbox"/>

Enviva completed a SBE because there currently is no SBP-endorsed Regional Risk Assessment (RRA) in the United States. Enviva’s SBE was independently reviewed by RS Berg and Associates, expert consultant who has decades of experience in the forestry industry and provides services to numerous forest companies in meeting sustainability requirements.

4 Supply Base Evaluation

4.1 Scope

Enviva has implemented policies and procedures appropriate to the size and scale of its operations and no indicators were excluded. The definitions of legal and sustainable as used in Standard 1 have been reviewed and met as substantiated in the supply base evaluations. Evidence to support is offered at the supply base level.

Because there is no SBP approved risk assessment in the US, Enviva developed a set of locally applicable verifiers (LAVs), which include a number of publically available sources, in addition to the internal monitoring already described. Details on LAVs are in the sections below.

4.2 Justification

Only a small proportion of feedstocks is sourced from SBP-approved certification programs, therefore Enviva completed a SBE to justify its rational for SBP-compliant feedstock. Enviva did not modify any indicators. For the indicators which are not already covered by our existing certifications, Enviva used a number of LAVs to support either risk determinations including:

- Draft FSC US National Risk Assessment
- FSC Centralized National Risk Assessment for the United States of America
- All applicable Federal & state laws, including environmental laws, and occupational health and safety laws
- BMP implementation reports
- State Natural Heritage programs
- Maps and data regarding high conservation values
- Supplier contracts
- Residual Supplier Reporting Form

4.3 Results of Risk Assessment

Each criterion was evaluated and measured against Enviva's existing forest certification and chain of custody programs. The supply base evaluation was peer reviewed by RS Berg and Associates. Enviva determined a rating of "low risk" for each indicator.

4.4 Results of Supplier Verification Programme

No indicators were defined as unspecified risk so therefore a Supplier Verification Program is not required.

4.5 Conclusion

Enviva has completed a robust supply base evaluation and fully meets the SBP requirements. All criterion have been fully evaluated and appropriate procedures and controls are in place to ensure successful management. As described above, Enviva has an extremely sophisticated data collection and monitoring program which supports the conclusions and actions in the risk assessment. Senior management is fully

engaged and involved in the success of SBP Standard conformance. Enviva has a well-qualified and knowledgeable staff whom are capable of maintaining process control to achieve conformance to the SBP Standards. Each criterion has specific controls (e.g. contractual, field verification, supplier data requests) to provide Enviva with the best level of confidence to ensure conformance to the criteria included in the SBP Standard.

5 Supply Base Evaluation Process

Enviva has a well-rounded competent staff of professionals with many years of experience in forest certification programs, policy and procedure development and natural resource management. These collective experiences and talents provided Enviva the ability to conduct its own supply base evaluation and risk assessment.

The mid-Atlantic region mills supply base area includes 213 counties in North Carolina, South Carolina and Virginia. Data from Enviva's internal Track & Trace and other monitoring programs are reviewed annually to ensure the appropriate area is included in the risk assessment. When needed, Enviva will scope in additional counties based on information from its suppliers following the process outlined in the SBP Standards. Using all these data sources, Enviva has mapped its supply base for primary and secondary feedstock inputs for all facilities. According to the USFS FIA database the total forested mid-Atlantic supply area is 15,944,484ha and all are considered temperate forest.

Enviva used the Draft FSC US Controlled Wood National Risk Assessment (NRA) (v0.1), FSC Centralized National Risk Assessment for The United States of America (FSC-CNRA-USA v1-0 EN) along with its third party certified PEFC/SFI Due Diligence System and FSC Controlled Wood Risk Assessment were used in developing the SBE. Various third party data sources were also used for research in the region such as; Forest Stewardship Council, The Nature Conservancy, United States Forest Service, United States Department of Labor, United States Department of Environmental Protection, State Forest Service Divisions, National Council for Air and Stream Improvement, World Wildlife Fund, World Bank Governance Index, Illegal Logging Portal, Transparency International, Green Peace, Conservation International, World Resources Institute, Convention on International Trade in Endangered Species, International Union for Conservation of Nature and the Databasin web mapping tool. .

Results from the stakeholder consultation were considered and incorporated if relevant to the supply area. The supply base evaluation was completed internally by qualified individuals and peer reviewed by RS Berg and Associates. These findings along with the corresponding mitigation measures were part of the risk assessment and evaluation process used by Enviva in completing the SBE.

As part of its stakeholder engagement, Enviva worked with The US Endowment for Forestry and Communities to evaluate the mid-Atlantic catchment area to determine other areas of high conservation value. The Endowment consulted with leading independent academics and environmental organizations and identified four specific bottomland priority forest types; cypress-tupelo swamps, Atlantic white cedar stands, Pocosins and Carolina bays.

6 Stakeholder Consultation

6.1 Response to stakeholder consultation

In 2015 & 2016, Enviva initiated two stakeholder consultations to receive input for its SBP certification process. Both were conducted via email, with emails sent to over 160 individuals representing state agencies, universities, ENGOs, forest product companies, local community groups, and more. Each consultation was open for 30 days. Enviva set up a separate email account to manage the consultations, and monitored it daily for questions or comments. Enviva also set up a separate webpage on its website for each consultation as well that contained all the same information as the email and had a downloadable comment form.

The first consultation was held from August 15th, 2015 – September 15, 2015 and was based on SBP Standard #1: Feedstock Compliance Standard. During Consultation 1, Enviva asked interested stakeholders to provide us with any data or resources they believed would help us properly complete our Supply Base evaluation based on the Indicators in Standard #1. We received two comments.

Enviva's second consultation was completed between January 8 and February 2, 2016. This consultation focused on the Locally Applicable Verifiers (LAVs) used to support the risk designations in our Supply Base Evaluation. Interested stakeholders were asked to comment on the LAVs Enviva chose and their applicability to certain indicators in Standard #1. We received one set of comments from one stakeholder. A list of stakeholder who received a request to participate is below.

Focusing on sustainable sourcing solutions

Organization	States Covered
25 X 25	US
American Birds Conservancy	US
American Forest & Paper Association	US
American Forest Management	US
Calhoun Timber Co	NC/VA
Carolina Pine & Hardwoods	NC/VA
Cooper Marine and Timberlands	MS
Darden Logging	NC/VA
Davis Logging of VA.	VA
Dogwood	US
Duke University	NC
E.O. Wilson Biophilia Center	NC
Environmental Defense Fund	NC/SC
Forest Investment Associates	US
Forest Landowners Association	US
Franklin Lumber	NC/VA
Longleaf Alliance	NC, SC, MS, AL GA
Meherrin River	NC/VA
Mid-ATL National Wildlife Fed	NC, VA, SC
Mid-South Woodland Owners Assoc	NC, SC, TN, VA
Mossy Oak	SE US
National Alliance of Forest Owners	US
National Association of State Foresters	US
National Council for Air and Stream Improvement	US
National Resources Defense Council	US
National Wild Turkey Federation	US
National Wildlife Foundation	US
NC ProLogger/NC Forestry Association	NC
North Carolina ATFS	NC
North Carolina Bioenergy Council	NC
North Carolina Coastal Land Trust	NC
North Carolina Forest Service D10	NC
North Carolina Forest Service D11	NC
North Carolina Forest Service D13	NC
North Carolina Forest Service D5	NC

Organization	States Covered
North Carolina Forest Service D6	NC
North Carolina Forest Service D7	NC
North Carolina Landowners Association	NC
North Carolina Native Plant Society	NC
North Carolina Society of American Foresters Chapter	NC
North Carolina State University	NC
North Carolina Wildlife Federation	NC
North Carolina/Virginia Association of Consulting Foresters	NC
Partnership for Southern Forest Conservation	SE US
Pearl River-Stone County Forestry Assn	MS
Pinchot Institute	US
Roundtable for Sustainable Biofuels	US
S & M Forest Management Group	NC/VA
Seaboard Timber Co, Inc	NC, SC
Sharp Logger	VA
Southeast Fiber Supply	NC/VA
Southern Environmental Law Center	US
Swain & Temple, Inc.	NC, VA
T L Bain	NC/VA
The Conservation Fund	US
The Endowment for Forests and Communities	US
The Nature Conservancy of North Carolina	NC
The Nature Conservancy of Virginia	VA
Timber Investment Resources	GA, TN, NC
Trust for Public Land	US
Virginia Conservation Network (NWF Virginia Affiliate)	VA
Virginia Forestry Association	VA
Virginia Landowners Association	VA
Virginia Native Plant Society	VA
Virginia Society of American Foresters Chapter	VA
Virginia Tree Farm Chapter	VA
Weyerhaeuser	US
Wildlife Management Institute	US
Woodridge Timber Co	NC/VA
World Wildlife Federation	US

7 Overview of Initial Assessment of Risk

Enviva used the Draft FSC US Controlled Wood National Risk Assessment (NRA) (v0.1), FSC Centralized National Risk Assessment for The United States of America (FSC-CNRA-USA v1-0 EN) along with its third party certified PEFC/SFI Due Diligence System and FSC Controlled Wood Risk Assessment were used in developing the SBE. Various third party data sources were also used for research in the region such as; Forest Stewardship Council, The Nature Conservancy, United States Forest Service, United States Department of Labor, United States Department of Environmental Protection, State Forest Service Divisions, National Council for Air and Stream Improvement, World Wildlife Fund, World Bank Governance Index, Illegal Logging Portal, Transparency International, Green Peace, Conservation International, World Resources Institute, Convention on International Trade in Endangered Species, International Union for Conservation of Nature and the Databasin web mapping tool.

Enviva Determined low risk for all indicators of the risk assessment.

Indicator	Initial Risk Rating		
	Specified	Low	Unspecified
1.1.1		X	
1.1.2		X	
1.1.3		X	
1.2.1		X	
1.3.1		X	
1.4.1		X	
1.5.1		X	
1.6.1		X	
2.1.1		X	
2.1.2		X	
2.1.3		X	
2.2.1		X	
2.2.2		X	
2.2.3		X	
2.2.4		X	
2.2.5		X	
2.2.6		X	
2.2.7		X	
2.2.8		X	
2.2.9		X	

Indicator	Initial Risk Rating		
	Specified	Low	Unspecified
2.3.1		X	
2.3.2		X	
2.3.3		X	
2.4.1		X	
2.4.2		X	
2.4.3		X	
2.5.1		X	
2.5.2		X	
2.6.1		X	
2.7.1		X	
2.7.2		X	
2.7.3		X	
2.7.4		X	
2.7.5		X	
2.8.1		X	
2.9.1		X	
2.9.2		X	
2.10.1		X	

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

No SVP is required

8.2 Site visits

NA

8.3 Conclusions from the Supplier Verification Programme

NA

9 Mitigation Measures

No mitigation measures identified

9.1 Mitigation measures

NA

9.2 Monitoring and outcomes

NA

10 Detailed Findings for Indicators

See Annex 1

11 Review of Report

11.1 Peer review

The mid-Atlantic SBE was independently peer-reviewed by RS Berg and Associates. R. S. Berg & Associates, Inc. has more than thirty five years of experience in the forest, paper and bio-energy industries and has worked with over 220 organizations in understanding their options and achieving certification to the Standard(s) of their choice. Scott Berg is a trained ISO 14001 EMS Lead Auditor and has over thirty five years in the forest and paper industry working for national and regional trade associations. As the data compiled for this report is generated by the SBE process, further peer review is not required.

11.2 Public or additional reviews

The supply base evaluation was reviewed by the certifying body during audit.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	Don Grant	Manager, Sustainability Standards	12/09/2017
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:	<i>Jennifer Jenkins, PhD</i>	<i>Vice President and Chief Sustainability Officer</i>	<i>13/09/2017</i>
	Name	Title	Date
Report approved by:	<i>Thomas Meth</i>	<i>Executive Vice President of Sales and Marketing</i>	<i>14/09/2017</i>
	Name	Title	Date
Report approved by:	<i>John Keppler</i>	<i>Chief Executive Officer</i>	<i>14/09/2017</i>
	Name	Title	Date

13 Updates

13.1 Significant changes to the Supply Base

No significant changes

13.2 Effectiveness of previous mitigation measures

2.1.2 Enviva's High Conservation Tract Approval process and secondary feedstock procedures are business as usual controls.

2.2.3 Enviva's Forest Conservation Fund has already helped conserve seven high conservation forest tracts in the mid-Atlantic region protecting more than 5,200 acres of sensitive forestland.

2.2.4 Enviva's High Conservation Tract Approval process and secondary feedstock procedures are business as usual controls.

13.3 New risk ratings and mitigation measures

2.1.2 Enviva's annual District of Origin and Supplier Data Request Form process meets the requirements described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

This approach is also in alignment with SBP Guidance Document: [Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.](#)

The process Enviva employ's through its District of Origin Process and annual Supplier Data Request process ensures Enviva can meet and exceed the guidance provided in the document therefore providing conformance to indicators 2.1.1 and 2.1.2 and confirming low risk.

2.2.3 The Enviva Forest Conservation Fund, a \$5 million, 10-year program sponsored by Enviva and administered by the U.S. Endowment for Forestry and Communities, is designed to protect tens of thousands of acres of sensitive bottomland forests in the Virginia-North Carolina coastal plain. The Enviva Forest Conservation Fund will award matching-fund grants to non-profit organizations to permanently protect ecologically sensitive areas and preserve working forests. (<http://envivaforestfund.org/>)

2.2.4 Enviva's annual District of Origin and Supplier Data Request Form process allows meets the requirements described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

This approach is also in alignment with SBP Guidance Document: [Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.](#)

13.4 Actual figures for feedstock over the past 12 months

Feedstock

- f. Total volume of Feedstock: 706,675 metric tonnes
- g. Volume of primary feedstock: 535,704 metric tonnes
- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes:
 - a. Forest Stewardship Council: 1.5%
 - b. Program for the Endorsement of Forest Certification: 7.6%
 - c. Not certified to an SBP-approved Forest Management Scheme: 90.9%
- i. List all species in primary feedstock, including scientific name

Common name	Scientific name
American beech	Fagus grandifolia
American elm	Ulmus americana
Atlantic white cedar	Chamaecyparis thyoides
Black cherry	Prunus serotina
Black gum	nyssa sylvatica
Black jack oak	Quercus marilandica
Black oak	Quercus velutina
Black walnut	Juglans nigra
Cherry bark oak	Qurecus pagoda
Chinkapin oak	Qurecus muehlenbergii
Green ash	Fraxinus pennsylvanica
Hackberry	Celtis occidentalis
Hickory	Carya spp.
Holly	Ilex opaca
Laurel oak	Quercus laurifolia

Common name	Scientific name
Live oak	Quercus virginiana
Loblolly pine	Pinus taeda
Longleaf pine	Pinus palustris
Northern red oak	Quercus rubra
Overcup oak	Quercus lyrata
Pecan	Cayra illinoensis
Persimmon	Diospyros virginiana
Pond pine	Pinus serotina
Post oak	Quercus stellata
Red maple	Acer rubrum
River birch	Betula nigra
River oak	Casuarina cunninghamiana
Shortleaf pine	Pinus echinata
Shumard oak	Quercus shumardii

Common name	Scientific name
Slash pine	Pinus elliotii
Souther red oak	Quercus falcata
Sugar maple	Acer saccharum
Swamp chestnut oak	Quercus michauxii
Sweet gum	Luquidambar styraciflua
Sycamore	Plantanus occidentalis
Virginia pine	Pinus virginiana
Water oak	Qurecus nigra
Water tupelo	Nyssa aquatica
White ash	Fraxinus americana
White gum	Eucalyptus wandoo
White oak	Quercus alba
Willow oak	Quercus phellos
Winged elm	Ulmus alata
Yellow poplar	Liridendron tulipifera

- j. Volume of primary feedstock from primary forest: 0.0 metric tonnes
- k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes:

- a. Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: 0.0
 - b. Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: 0.0
- l. Volume of secondary feedstock: 24.2% of the total sourced delivered as chips and dust or pine chips, dust or shavings. The feedstock is delivered from within the defined supply base as mapped in section 2.1.
- m. Volume of tertiary feedstock: 0.0%

13.5 Projected figures for feedstock over the next 12 months

Feedstock

- f. Total volume of Feedstock: 706,675 metric tonnes
- g. Volume of primary feedstock: 535,704 metric tonnes
- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes:
 - a. Forest Stewardship Council: 1.5%
 - b. Program for the Endorsement of Forest Certification: 7.6%
 - c. Not certified to an SBP-approved Forest Management Scheme: 90.9%
- i. List all species in primary feedstock, including scientific name

Common name	Scientific name
American beech	Fagus grandifolia
American elm	Ulmus americana
Atlantic white cedar	Chamaecyparis thyoides
Black cherry	Prunus serotina
Black gum	nyssa sylvatica
Black jack oak	Quercus marilandica
Black oak	Quercus velutina
Black walnut	Juglans nigra
Cherry bark oak	Qurecus pagoda
Chinkapin oak	Qurecus muehlenbergii
Green ash	Fraxinus pennsylvanica
Hackberry	Celtis occidentalis
Hickory	Carya spp.
Holly	Ilex opaca
Laurel oak	Quercus laurifolia

Common name	Scientific name
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Northern red oak	Quercus rubra
Overcup oak	Quercus lyrata
Pecan	Cayra illinoensis
Persimmon	Diospyros virginiana
Pond pine	Pinus serotina
Post oak	Quercus stellata
Red maple	Acer rubrum
River birch	Betula nigra
River oak	Casuarina cunninghamiana
Shortleaf pine	Pinus echinata
Shumard oak	Quercus shumardii

Common name	Scientific name
Slash pine	Pinus elliottii
Souther red oak	Quercus falcata
Sugar maple	Acer saccharum
Swamp chestnut oak	Quercus michauxii
Sweet gum	Luquidambar styraciflua
Sycamore	Plantanus occidentalis
Virginia pine	Pinus virginiana
Water oak	Qurecus nigra
Water tupelo	Nyssa aquatica
White ash	Fraxinus americana
White gum	Eucalyptus wandoo
White oak	Quercus alba
Willow oak	Quercus phellos
Winged elm	Ulmus alata
Yellow poplar	Liridendron tulipifera

- j. Volume of primary feedstock from primary forest: 0.0 metric tonnes
- k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes:

- a. Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: 0.0
 - b. Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: 0.0
- l. Volume of secondary feedstock: 24.2% of the total sourced delivered as chips and dust or pine chips, dust or shavings. The feedstock is delivered from within the defined supply base as mapped in section 2.1.
- m. Volume of tertiary feedstock: 0.0%

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Annex 1: Detailed Findings for Supply Base Evaluation Indicators

Preamble

Enviva's Ahsoskie Pellet mill is located in the United States. The country has a robust legal system developed using democratic processes. The "rule of law" social system is acknowledged by the World Bank as ranking in the top 90th percentile in *Government Effectiveness* and *Rule of Law*, and the 88th percentile in *Regulatory Quality* indicating the United States has proven it possesses effective means to ensure all laws and regulatory requirements are met or provide a means to address if lacking through legal recourse. All verifiers were reviewed by third party auditors. **Internal verifiers** (identified in bold text) may contain sensitive information that cannot be made publically available. External verifiers are publically available.

Enviva's forestry certifications

Enviva maintains third party certifications including:

- American Tree Farm System™ Independently Managed Group
- Forest Stewardship Council® (FSC) Chain of Custody and Controlled Wood Standard
- Program for the Endorsement of Forest Certifications™ (PEFC) Chain of Custody
- Sustainable Forestry Initiative® (SFI) Wood Sourcing
- Sustainable Forestry Initiative® (SFI) Chain of Custody

Tools used to develop the Supply Base Evaluation

Enviva developed this supply base evaluation using its FSC® Controlled Wood Risk Assessment and PEFC™ Due Diligence System as a basis. Enviva also used a report prepared for the American Hardwood Export Council (AHEC) entitled, Assessment of Lawful Harvesting & Sustainability of US Hardwood Exports and Forest2Markets report entitled, Wood Supply Market Trends in the US South 1995 - 2015. Other sources of information include but are not limited too; FSC High Conservation Area Mapping tool, The Nature Conservancy, World Wildlife Fund, World Bank Governance Index, Illegal Logging Portal, Transparency International, Green Peace, Conservation International, World Resources Institute, Convention on International Trade in Endangered Species, International Union for Conservation of Nature and the Databasin web mapping tool.

Enviva used Forest Stewardship Councils® Central National Risk Assessment for The United States of America (FSC-CNRA-USA) to assess FSC Controlled wood Category 1: Illegally harvested wood and Controlled wood Category 5: Wood from forests in which genetically modified trees are planted. The FSC-CNRA-USA found both of these in categories to be low risk in the United States.

Supplier level assessments

Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.

Enviva developed the Enviva Forest Conservation Fund HCV Tract Approval Process (HCV Tract Approval Process) to ensure forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.

Enviva's annual District of Origin and Supplier Data Request Form process allows secondary feedstock primary processing mills as described above meets the requirements described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

This approach is also in alignment with SBP Guidance Document: [Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.](#)

The process Enviva employ's through its District of Origin Process and annual Supplier Data Request process ensures Enviva can meet and exceed the guidance provided in the document therefore providing conformance to indicators 2.1.1 and 2.1.2 and confirming low risk.

Supplier level systems conclusion

These systems have been verified effective by an independent third party Certifying Body (CB), who reviewed both internal and external sources of information in other Enviva mill SBP audits. The CB conducted the required review of Track & Trace information, harvest site inspections, District of Origin information and processes secondary supplier site visits, interviews and analysis. The CB confirmed that Enviva's supplier assessment processes are sound and operating consistent with SBP Guidance.

Forestry best management practices

Many of the indicators contain references to forestry BMP's (BMP). BMP guidelines were developed at the state level in response to the federal Clean Water Act requirement pertaining to non-point source water quality. Most states have monitoring programs to evaluate BP effectiveness and compliance rates, and some states require their use. Enviva and many other wood industry companies, however, require the use of forestry BMP's regardless of the state's stance. Table 1 below* shows the high rate of BMP compliance across the supply base area.

Table 1. Selected Percent Forestry Best Management Compliance Rates by State¹

	NC	SC	VA
Timber Harvest		94	
Forest Road	84	98	85
Skid Trail	82		90
Log Landing			94
Stream Crossing	72	81	92
SMZ ²	91	92	92
Wetlands			92
Reforestation		100	
State Average	85	91	90

1. Not all categories are ranked in every state.
2. Streamside Management Zone.

*Source National Association of State Foresters publication, *Protecting Water Quality through State Forestry BMP's* (https://stateforesters.org/sites/default/files/issues-and-policies-document-attachments/Protecting_Water_Quality_through_State_Forestry_BMPs_FINAL.pdf)

	Indicator
1.1.1	The Biomass Producer's Supply Base is defined and mapped.
Finding	<p><u>Evidence</u> Enviva's supply base area is determined through information gathering efforts as outlined in an internal Feedstock Compliance Implementation Manual.</p> <p>Two established Enviva processes were used to determine the supply base area. Enviva's proprietary Track & Trace Program is used to manage all primary feedstock suppliers and its robust secondary feedstock supplier District of Origin Data Request Process is used to manage its secondary feedstock suppliers.</p> <p>The supply base area includes counties from the coastal plains to the piedmont regions of North Carolina, South Carolina and Virginia. Data is entered into computer programs and are reviewed annually to ensure the appropriateness.</p> <p>Enviva maintains Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) Chain of Custody (CoC) certifications for its pellet mills. These certifications track wood through the supply chain, while also ensuring unwanted sources of wood do not enter the supply chain.</p> <p><u>Conclusion</u> The risk of wood from unknown regions is low.</p>
Means of Verification	a. Preamble citations b. ENV-COC-02 CS Procedure c. ENV-COC-03 CS Risk Assessment d. Track & Trace™ e. District of Origin Data Request Forms
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
1.1.2	Feedstock can be traced back to the defined Supply Base.
Finding	<p><u>Evidence</u> Enviva's supply base area is determined through information gathering efforts as outlined in an internal Chain of Custody Implementation Manual.</p> <p>Enviva's proprietary Track & Trace is used to manage all primary feedstock suppliers and its robust secondary feedstock supplier District of Origin Data Request Process ensures secondary feedstock is from known areas with the mills supply base area.</p> <p>The supply base area and includes counties from the coastal plains to the piedmont regions of North Carolina, South Carolina and Virginia. Data is entered into computer programs and are reviewed annually to ensure the appropriateness.</p> <p>Enviva maintains Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) Chain of Custody (CoC) certifications for its pellet mills. These certifications track fiberwood through the supply chain, while also ensuring unwanted sources of fiberwood do not enter the supply chain.</p> <p>Enviva requires all feedstock suppliers to sign a Master Wood Products Agreement each year ensuring Enviva knows who supplies feedstock and where it is sourced.</p> <p><u>Conclusion</u> Enviva's Chain of Custody certifications and Controlled Wood Risk Assessment/ Due Diligence System ensures the origin of all feedstocks is known.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. ENV-COC-01 Implementation Manual d. ENV-COC-02 CS Procedure e. ENV-COC-03 CS Risk Assessment f. Master Wood Purchase Agreement g. Track & Trace
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
1.1.3	The feedstock input profile is described and categorised by the mix of inputs.
Finding	<p><u>Evidence</u> Enviva tracks purchased and consumed material by product type (roundwood, wood chips, residuals, etc.) and general species groupings of softwood or hardwood. Wood is stored at the mill site by product/species and input verified by monthly inventory processes. Certified wood inputs coming into the mill site are mingled with other wood and all non-certified inputs are considered “controlled”.</p> <p>Enviva maintains FSC and PEFC CoC certifications for its pellet mills. These certifications track wood through the supply chain, while also ensuring unwanted sources of wood do not enter the supply chain. Enviva is third party certified to the Sustainable Forestry Initiative (SFI) Wood Sourcing Standard.</p> <p><u>Conclusion</u> Enviva's certification processes ensure feedstocks are properly defined and categorised.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-COC-01 Implementation Manual c. ENV-COC-02 CS Procedure d. ENV-COC-03 CS Risk Assessment e. FSC US Controlled Wood National Risk Assessment – DRAFT (v0.1) f. Master Wood Purchase Agreement g. Mill specific Monthly Wood Excel
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
1.2.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood:</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign a Master Wood Supply Agreement annually.</p> <p>Enviva's Track & Trace Program requires suppliers to provide GPS coordinates, landowner name and other pertinent information for each track they harvest and send feedstock to Enviva which enables Enviva to use tax maps to verify ownership if needed.</p> <p>Enviva's secondary feedstock District of Origin Process ensure it knows the sources of its secondary feedstocks. Enviva evaluates each secondary feedstock supplier to ensure it only purchases wood from credible suppliers.</p> <p><u>Procedures</u> Enviva's due diligence through its Controlled Wood/Controlled Sources Risk Assessment demonstrates that the rule of law and public agency governance are upheld and so illegality is considered low risk. Enviva has implemented procedures to conform to EUTR.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> US ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law. Evidence of the effectiveness of law enforcement is evident in news reporting and reveals no widespread or systematic criminal activity in the supply base area.</p> <p>Enviva also uses sources such as the Illegal Logging Portal to assess the likelihood of illegal logging activity in the supply area. In addition, each state in the supply base area has laws protecting landownership rights and governing land use.</p> <p>The AHEC Legality Study indicates that the states within the Supply Base Area have laws to address timber theft and there is evidence these laws are enforced and highly effective. Government agencies exist to enforce laws and legislation related to preventing illegal harvesting of wood.</p> <p>FSC-CNRA-USA finding of low risk for illegally harvested wood in the United States.</p> <p>Signed Master Wood Purchase Agreements</p>

	<p>Track & Trace records</p> <p>District of Origin records</p> <p><u>Conclusion</u> The risk of illegally harvested wood or wood from land use change entering the supply chain is low.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. ENV-COC-01 Implementation Manual d. ENV-COC-02 CS Procedure e. ENV-COC-03 CS Risk Assessment f. Master Wood Purchase Agreement g. Track & Trace h. Enviva Sustainability Policy i. World Bank j. Illegal Logging Portal k. National Association of State Foresters l. State Laws m. FSC-CNRA-USA n. Assessment of Lawful Harvesting & Sustainability of US Hardwood Export Council (AHEC Legality Study)
<p>Evidence Reviewed</p>	<p>All means of verification reviewed. .</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
1.3.1	The BP has implemented appropriate control systems and procedures to ensure that feedstock is legally harvested and supplied and is in compliance with EUTR legality requirements.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • <u>Wood harvested in violation of traditional and civil rights;</u> • <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> • <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> • <u>Wood from forests where genetically modified trees are planted;</u> • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure Enviva is aware of changes. The analysis includes a review of appropriate laws regarding legality of harvest and compliance with EUTR requirements</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p>Enviva has a Controlled Sources Risk Assessment and a Due Diligence System in place to ensure that legality requirements within the Supply Base are met. These Assessments required an in-depth look into legality of harvest and provide assurance that Enviva is in compliance with EUTR legality requirements. Some of the evidence used includes:</p> <ul style="list-style-type: none"> • www.illegal-logging.info - indicates Enviva's sourcing area is not at risk for illegal logging • www.eia-international.org - indicates a low risk for trade in illegally logged wood • www.eldis.org - Enviva's supply base area is not included in regions with illegal logging issues • www.transparency.org - identified no issues with corruption bribery or other illegal activities in the supply base area. <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States regulation of forestry practices has its roots in Federal law and in Acts designed to provide guidance to states for developing state specific laws and regulations. The US ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law. Evidence of the effectiveness of law enforcement is evident in news reporting and this reporting reveals no widespread or systematic criminal activity in the supply base area.</p> <p>The AHEC Legality Study indicates that the states within the Supply Base Area have laws to address timber theft and there is evidence these laws are enforced and highly</p>

	<p>effective. Government agencies exist to enforce laws and legislation related to preventing illegal harvesting of wood.</p> <p>FSC-CNRA-USA findings of low risk for illegally harvested wood in the Unites States.</p> <p>Signed Master Wood Purchase Agreements.</p> <p><u>Conclusion</u> Enviva is in compliance with EUTR legality requirements.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. ENV-COC-01 Implementation Manual d. ENV-COC-02 CS Procedure e. ENV-COC-03 CS Risk Assessment f. Enviva Sustainability Policy g. FSC-CNRA-USA h. Master Wood Purchase Agreement i. Enviva EUTR Compliance Document j. Assessment of Lawful Harvesting & Sustainability of US Hardwood Export Council (AHEC Legality Study) k. World Bank
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
1.4.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that payments for harvest rights and timber, including duties, relevant royalties and taxes related to timber harvesting, are complete and up to date.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations including payment of royalties and taxes. The contract also includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood</u>; • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement.</p> <p><u>Procedures</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure Enviva is aware of changes. The analysis includes a review of the existence of appropriate laws to ensure the payment of relevant fees and taxes.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> The states in supply all have laws governing taxation. The United States legal system is robust and capable of enforcing these Federal and state laws.</p> <ul style="list-style-type: none"> • Transparency International identified no issues with corruption bribery or other illegal activities in the supply base area. • AHEC Legality Study determined the region supply base area is located in a low risk for illegal activity • The World Bank ranked the US in the top 90th percentile in the Rule of Law category <p>FSC-CNRA-USA findings of low risk for illegally harvested wood in the United States.</p> <p>Signed Master Wood Purchase Agreements.</p> <p><u>Conclusion</u> There is a low risk of non-payment of taxes, fees, royalties, etc.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. ENV-COC-03 CS Risk Assessment d. Master Wood Purchase Agreements e. Severance Tax Reports f. Transparency International g. World Bank h. FSC-CNRA-USA

Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
1.5.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is supplied in compliance with the requirements of CITES.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> • <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement.</p> <p><u>Procedures</u> Enviva maintains an FSC Controlled Wood Risk Assessment and a PEFC Due Diligence System covering the supply base area. These assessments determined the supply base area as a low risk for the potential to source CITES species. CITES enforcement is controlled at the federal level involving US Customs and Border Protection, Animal and Plant Health Inspection Services and the US Fish and Wildlife Service.</p> <p>Enviva policies declare that it will avoid being directly or indirectly involved in the purchase of raw material that is in violation of CITES.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> None of the tree species Enviva uses at its pellet mills are on the CITES list.</p> <p>FSC-CNRA-USA findings of low risk for illegally harvested wood in the United States.</p> <p>Signed Master Wood Purchase Agreements.</p> <p><u>Conclusion</u> There is a low risk of CITES species being used as feedstock.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-COC-01 Implementation Manual c. ENV-COC-02 CS Procedure d. ENV-COC-03 CS Risk Assessment e. Residual Supplier Data Form f. Enviva Sustainability Policy g. FSC-CNRA-USA h. Enforcement of the Convention on International Trade of Endangered Species
Evidence Reviewed	All means of verification reviewed. Internal documents, policies and procedures
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
1.6.1	<p>The Biomass Producer has implemented appropriate control systems and procedures to ensure that feedstock is not sourced from areas where there are violations of traditional or civil rights.</p>
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood:</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • <u>Wood harvested in violation of traditional and civil rights;</u> • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement.</p> <p><u>Procedures</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure Enviva is aware of changes. The analysis includes a review of laws governing traditional and civil rights.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States, land use and tenure questions have long been decided and in the southeast there are no indigenous people groups with controversial traditional or civil rights to forestlands. Enviva has a Controlled Sources Risk Assessment System in place to ensure operations do not violate traditional or civil rights.</p> <p>Existing company policies declare Enviva will avoid being directly or indirectly involved in the violation of traditional and human rights. The wood supply area is not designated within a country or district that is a source of conflict timber. There is tribal and federal government owned Native American reservations within the supply base, but no traditional or civil rights issues are present in these areas.</p> <p>The FSC US National Risk Assessment draft concluded;</p> <p>"...the U.S. has recognized and equitable processes in place to resolve conflicts of substantial magnitude pertaining to traditional rights including use rights, cultural interests or traditional cultural identity. In the U.S., Native Americans with a land base are recognized as Sovereign Nations and accorded rights to manage their land and affairs. In addition, Native Americans have an equitable process to resolve conflicts over land management. Through the U.S. court system, many Native American tribes have challenged, won decisions, and resolved issues concerning land management and use rights. There are many examples within the U.S. where tribes have successfully been able to exercise treaty rights through formal and informal conflict resolutions systems."</p> <p>The AHEC Legality Study found the same to be true.</p>

	<p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> There is a low risk sourcing practices are a threat to traditional or civil rights.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-COC-01 Implementation Manual c. ENV-COC-02 CS Procedure d. ENV-COC-03 CS Risk Assessment e. Enviva Sustainability Policy f. FSC US National Risk Assessment Draft g. Assessment of Lawful Harvesting & Sustainability of US Hardwood Export Council (AHEC Legality Study) h. Advisory Council on Historic Preservation
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.1.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.
Finding	<p><u>Control System</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure Enviva is aware of forest impact assessments, planning implementation and monitoring efforts in all of Enviva's supply areas. The analysis includes the identification of areas that may contain high conservation values.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment uses sources such as World Wildlife Fund, Conservation International, Greenpeace, World Resources Institute, Global Forest Frontier Forests, Conservation International, World Conservation Union and IUCN to conduct a state by state analysis of its supply area. These sources are reviewed annually to assess changes in the supply base area.</p> <p><i>High conservation value assessment of the supply base area</i></p> <p>Information from WWF on the Appalachian-Blue Ridge Forests Ecoregion (http://www.worldwildlife.org/ecoregions/na0403) reports "exceptional (biodiversity) due to the broad range of microhabitats, presence of numerous relict species and communities, and geologic stability over long periods of evolutionary history" despite land-clearing for farming and other development and extensive logging. Ecological resiliency explains this in part, but the presence of large blocks and extensive areas of lightly-managed and unmanaged public land support this biodiversity: "Several blocks of more or less intact habitat remain as patches on the landscape. A large majority of them can be found within public lands." The information on the site regarding management practices on federal lands is out of date; there are very low levels of timber management on federal land in this region, and most practices which are implemented are designed to maintain or restore native community types and to emulate natural disturbance regimes. Numerous peer-reviewed studies show that Oak forests on medium- and high-quality (richer) sites are at risk of loss from lack of appropriate types of disturbance. Reductions in the amount and severity of fires are a major factor. Federal researchers and managers are attempting to develop "fire surrogate" strategies, with timber harvesting one such option to maintain the forest type within the natural range of variability regarding forest age and structure. Considering the amount of land protected from development and managed primarily for watershed, aesthetic, and ecological values and the entire span of Enviva's management systems such as its tract approval process, third-party audited Track & Trace database, and verifiable monitoring program as well as the company's core forestry programs such as outreach, logger training and an emphasis on the correct use of BMP's there is a low risk of sourcing regarding threats to eco-regionally significant high conservation values in the Appalachian-Blue Ridge Forests ecoregion.</p> <p>Information from WWF on the Southeastern Mixed Forests Ecoregion (http://www.worldwildlife.org/ecoregions/na0413) does not identify at risk High Conservation Value Forests. The 9 identified Remaining Blocks of Intact Habitat are the most likely places where HCVPs might exist. The largest of these are located within U.S. National Forests. Harvests in the U.S. National Forests are subject to intensive Environmental Assessment and Environmental Impact analysis. In recent years there have been harvests on a very small proportion of national forests in this ecoregion, and most harvests that do occur are designed to restore forest vegetation to structures and processes within the natural range of variability. The entire span of the Enviva forestry programs was considered when assessing this information from WWF. Enviva's management systems such as its tract approval process, third-party audited Track & Trace database, and verifiable monitoring program and the company's core forestry</p>

	<p>programs such as outreach, logger training and an emphasis on the correct use of BMP's all help ensure that there is a low risk of sourcing unacceptable sources involving threats to eco-regionally significant high conservation values in the Southeastern Mixed Forests ecoregion.</p> <p>Information from the WWF on the Middle Atlantic Coastal Forests Ecoregion (https://www.worldwildlife.org/ecoregions/na0517) describes the region's importance for biodiversity because it "contains the most diverse assemblage of freshwater wetland communities in North America and perhaps of all temperate forest ecoregions... River swamp forests or bottomland forests were once prominent in this ecoregion and are one the most visually appealing habitats in North America. This forest type is dominated by bald cypress (<i>Taxodium distichum</i>) and swamp tupelo (<i>Nyssa sylvatica</i> var. <i>biflora</i>).\" In recognition of this diversity and the importance of existing examples of this forest type that are older and less disturbed Enviva consulted with leading independent academics and environmental organizations, the US Endowment for Forestry & Communities that identified four specific bottomland priority forest types; Cypress-tupelo swamps, Atlantic white cedar stands, Pocosins and Carolina bays as area. Enviva's Forest Conservation Fund website (http://envivaforestfund.org/about-the-enviva-forest-conservation-fund/about-bottomland-forests/) has additional information about these bottomland forest types. Enviva has committed not to source from high conservation value areas that might fall into one of these four categories.</p> <p>Enviva's Track & Trace Program and HCV Tract Approval Process can identify and ensure Enviva can meet its commitment to avoid sourcing wood from high conservation value forests in the supply base area.</p> <p>A review of Global Forest Watch Frontier Forest website and found no Frontier Forests to be present within the company's supply base area.</p> <p>There are no regions identified by Conservation International as a High Biodiversity Wilderness Areas (defined as areas that contain contiguous forest ecosystems greater than 500 km² based on the map of such areas prepared by Conservation International (CI).</p> <p>A review of the World Conservation Union and IUCN did not indicate any species of concern in the supply base area.</p> <p>Enviva's processes are in alignment with SBP Guidance Document: <u>Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US</u>. The process Enviva employ's through its District of Origin Process and annual Supplier Data Request process ensures Enviva exceed the guidance provided in the document therefore providing conformance to indicators 2.1.1 and 2.1.2 and confirming low risk.</p> <p><u>Evidence</u> Enviva demonstrates to the Certifying Body its ability to map the supply base area and potential areas of high conservation value during annual audits.</p> <p>Track & Trace records</p> <p>HCV Track Approval Process records</p> <p><u>Conclusion</u> Enviva has adequately identified potential areas of high conservation values in the supply base area.</p>
<p>Means of Verification</p>	<p>a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. ENV-COC-01 Implementation Manual</p>

	<ul style="list-style-type: none"> d. ENV-COC-02 CS Procedure e. ENV-COC-03 CS Risk Assessment f. Track & Trace g. HCV Tract Approval Process h. Enviva Sustainability Policy i. FSC High Conservation Values mapping tool j. FSC US Controlled Wood National Risk Assessment DRAFT k. Data Basin web mapping tool l. The Nature Conservancy m. US Endowment for Forestry and Communities n. World Wildlife Fund o. Conservation International p. Global Forest Frontier Forests q. World Conservation Union r. IUCN s. Enviva Forest Conservation Fund
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.1.2	The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.
Finding	<p><u>Control system/Procedures</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> • <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement. The Agreement requires suppliers to abide by forest management activities regulations.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva’s Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract’s ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP</p>

supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.

Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

Enviva's processes are in alignment with SBP Guidance Document: Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.

The process Enviva employ's through its District of Origin Process and annual Supplier Data Request process ensures Enviva exceed the guidance provided in the document therefore providing conformance to indicators 2.1.1 and 2.1.2 and confirming low risk.

Enviva engages with interested stakeholders through its Bottomland Hardwood Working Group to evaluate forest management and harvesting techniques for bottomland forests to ensure the best information is used in sourcing decisions.

Enviva actively engages environmental organizations like The Nature Conservancy to discuss strategies that improve forest management activities.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Evidence

Enviva compared its supply base area to various credible data sources listed in the Means of Verification to map potential high conservation value areas that may be in the supply base area.

Enviva's Controlled Wood/Controlled Sources Risk Assessment reviewed sources such as World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state analysis of its supply area. The analysis indicates there are two major threats to forest: conversion and degradation. Forestry practices were not cited as a threat to high conservation value areas. Global Forest Frontier Forest website identifies no Frontier Forest are in the supply area. Conservation International does not identify any High Diversity Wilderness Areas

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Enviva demonstrates to the Certifying Body its ability to map the supply base area and potential areas of high conservation value during annual audits using information from the sources described in the Control system section.

Enviva's proprietary Track & Trace Program information is available on Enviva's website.

Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.

	<p>Signed Master Wood Purchase Agreements</p> <p>District of Origin Records</p> <p>Track & Trace records</p> <p>HCV Tract Approval Process records</p> <p><u>Conclusion</u> Enviva has controls in place to prevent potential threats to forest and other areas of high conservation values due to forest management activities.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation d. ENV-COC-03 Controlled Sources Risk Assessment e. FSC US Controlled Wood National Risk Assessment f. Master Wood Purchase Agreement g. State BMP Manuals h. NASF Water Quality Report i. NASF State Forest Management Plans j. NASF State Wildlife Management Plans k. District of Origin l. World Wildlife Fund m. Conservation International n. Greenpeace o. World Resource Institute Global Forest Frontier Forests p. Conservation International q. World Conservation Union r. IUCN s. Track & Trace t. HCV Tract Approval Process
<p>Evidence Reviewed</p>	<p>All verification means reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.1.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • Illegally harvest wood; • Wood harvested in violation of traditional and civil rights; • <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> • <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement. The Agreement requires suppliers to avoid feedstock sources from land use change.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva’s Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract’s ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva’s HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p><i>Secondary Feedstock</i> Enviva’s Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP supply base evaluation process and that the suppliers’ sourcing practices do not pose a threat to these areas.</p> <p>Enviva’s annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP’s Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva</p>

	<p>to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.</p> <p>Enviva's processes are in alignment with SBP Guidance Document: <u>Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.</u></p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The analysis includes a review of land use change trends in the supply area.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> Information concerning cover type as well as other pertinent information is collected to ensure Enviva complies with its commitment not to drive conversion. Contracts require adherence to this policy and standard supplier correspondence also highlights the necessity to avoid these sources. United States Forest Service Forest Inventory and Analysis (FIA) figures covering the supply base indicate that the growth of the forest generally exceeds removals.</p> <p>During third party audits the Certifying Body confirmed Enviva's Controlled Wood/Controlled Sources Risk Assessment is adequate and MWPA's are in place.</p> <p>Enviva does not source from production plantations as defined in the SBP Glossary as "forests of exotic species that have been planted or seeded by human intervention and that are under intensive stand management, are fast growing and subject to short rotations (e.g. Poplar, Acacia or Eucalyptus plantations)."</p> <p>Signed Master Wood Purchase Agreements</p> <p>Track & Trace records</p> <p>District of Origin records</p> <p>HCV Tract Approval Process records</p> <p><u>Conclusion</u> There is a low risk of feedstock sources include conversion to non-forest lands or production plantation as defined by SBP.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. ENV-COC-02 CS Procedure d. Master Wood Purchase Agreement e. ENV-COC-03 CS Risk Assessment f. Track & Trace g. District of Origin h. HCV Tract Approval Process i. FSC Controlled Wood Risk Assessment (FSC website)
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.2.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood:</u> • Wood harvested in violation of traditional and civil rights; • <u>Wood harvested from forests where high conservation values are threatened by management activities:</u> • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP</p>

supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.

Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

Enviva's processes are in alignment with SBP Guidance Document: Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Enviva engages with interested stakeholders through its Bottomland Hardwood Working Group to evaluate forest management and harvesting techniques for bottomland forests to ensure the best information is used in sourcing decisions.

Enviva actively engages environmental organizations like The Nature Conservancy to discuss strategies that improve forest management activities.

Procedure

Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure Enviva is aware of forest impact assessments, planning implementation and monitoring efforts in all of Enviva's supply area.

Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement

Evidence

All of the states in the supply base area offer reforestation incentive programs and the success of these programs as well as BMP compliance information for most states can be found on the National Association of State Foresters website in the form of fact sheets and reports. All of the states have forestry BMP's guidelines, and Enviva contractually requires its suppliers to require the use of forestry BMP's.

The AHEC Legality Study found:

"States in the hardwood-producing region have very complex and diverse legal authorities over various aspects of forests and each state has crafted its own approach to fostering sustainable forest management."

"Many states have implemented voluntary or incentive-based programs to achieve sustainable forestry objectives. Only sporadic information can be found in the formal literature or in media reporting about violations or potential violations of state regulations in the hardwood-producing states. Information that is readily available suggests that state regulatory agencies are not timid about issuing citations or pursuing violators."

	<p>"While states in the hardwood-producing region take different approaches to regulating harvesting and forest practices, the data suggest that all states direct significant resources to forest sustainability issues. The extent of regulation in a given state is not necessarily an indication of how well forests are managed, but it does relate to legal compliance with state laws and thus the legality of hardwood production. The available data suggest that states in the hardwood region are diligent about enforcing regulations that affect forest practices."</p> <p>The Threatened and Endangered Species Act is vigorously enforced in the United States and effective: this conclusion is supported by Martin et al. (2005), in the peer-reviewed publication entitled "The Effectiveness of the Endangered Species Act: A Quantitative Analysis" (BioScience (2005), Vol. 55 Is. 4(1): 360-367.)</p> <p>District of Origin records</p> <p>Track & Trace records</p> <p>HCV Tract Approval Process records</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> Feedstock is sourced from areas with forest impact assessments, planning, implementation and monitoring.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. Master Wood Purchase Agreement d. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation e. ENV-COC-02 Controlled Sourcing Procedure f. Master Wood Purchase Agreement g. ENV-COC-03 Controlled Sources Risk Assessment h. Track & Trace i. District of Origin Process j. HCV Tract Approval Process k. State BMP Manuals l. NASF State Forest Fact Sheets m. NASF Water Quality Report n. BioScience website.
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.2.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included</p>

in the SBP supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.

Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

Enviva's processes are in alignment with SBP Guidance Document: Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.

Enviva engages with interested stakeholders through its Bottomland Hardwood Working Group to evaluate forest management and harvesting techniques for bottomland forests to ensure the best information is used in sourcing decisions.

Enviva actively engages environmental organizations like The Nature Conservancy to discuss strategies that improve forest management activities.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Procedure

Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure Enviva is aware of forest impact assessments, planning implementation and monitoring efforts including forestry best management practices all of Enviva's supply areas. A review of BMP implementation rates is included.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement

Evidence

Each State Forestry Agency/Commission is responsible for implementing forestry BMP's as directed by the Clean Water Act and conducting periodic BMP implementation monitoring. State-wide BMP compliance reports are readily available.

Enviva is a member of regional state forestry associations responsible for reviewing and developing logger training in conjunction with state forestry associations related to forestry best manage practices. Enviva interacts with these groups to improve forestry best management practices guidelines and monitor enforcement.

Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.

The NASF website contains many useful reports including, *Effectiveness of forestry BMP's in the United States: Literature Review*, which was published in *Forest Ecology and Management* (2016: 133 - 151). The review determined forestry BMP's are effective when implemented as recommended by state forestry agencies. Proper implementation of forestry BMP's protect soil quality.

	<p>There are few studies looking at the effect of timber harvesting on forest soils in the United States. The United States Department of Agriculture Forest Service General Technical Report INT-69 titled, <i>Forest Soil Biology - Timber Harvesting Relationships: A Perspective</i>, concluded generally timber harvesting does not have a long term impact on forest soil productivity and if changes do exist these are generally small and only last a few years.</p> <p>State BMP compliance rates</p> <p>Track & Trace records</p> <p>District of Origin records</p> <p>HCV Tract Approval Process records</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> There is a low risk sourcing practices will degrade forest soils.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. ENV-COC-03 Controlled Sources Risk Assessment d. Master Wood Purchase Agreement e. Track & Trace f. District of Origin Process g. HCV Tract Approval Process h. State BMP Manuals i. NASF Water Quality Report j. BMP implementation rate information for states in supply base area k. Effectiveness of forestry BMP's in the United States: Literature Review. l. Forest Soil Biology - Timber Harvesting Relationships: A Perspective m. Preamble citations n. Track & Trace Program
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.2.3	The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).
Finding	<p><u>Control system/Procedures</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • Illegally harvest wood; • Wood harvested in violation of traditional and civil rights; • <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> • <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement requires suppliers to avoid key ecosystems and habitats such as old growth forests and forest that could be threatened by forest management activities.</p> <p>The Enviva Forest Conservation Fund, a \$5 million, 10-year program sponsored by Enviva and administered by the U.S. Endowment for Forestry and Communities, is designed to protect tens of thousands of acres of sensitive bottomland forests in the Virginia-North Carolina coastal plain. The Enviva Forest Conservation Fund will award matching-fund grants to non-profit organizations to permanently protect ecologically sensitive areas and preserve working forests. (http://envivaforestfund.org/)</p> <p>Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts including an analysis of ecosystem and habitats all of Enviva's supply area.</p> <p>Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> The Supply Base Area contains about 15,944,484ha. 22% of the supply base area is currently controlled and protected federal/state/local government ownership or easements held by various non-profit organizations. The United States has a long history of forest conservation and protection supported by taxation at various levels as well as tax incentives to encourage those who qualify to place protective easements on lands they deem special. Enviva and its suppliers provide tax revenues that permit the</p>

	<p>conservation work in the supply base area to grow. The table below describes the ownership patterns of the protected areas in supply area.</p> <p>Enviva's Controlled Wood Risk Assessment and Due Diligence System evaluated World Wildlife Fund ecoregions associated with the supply base area and found there are sufficient examples of forest protection in all of the WWF ecoregions. Some examples include:</p> <ol style="list-style-type: none"> 1. Appalachian-Blue Ridge Forests (Temperate Broadleaf and Mixed Forests biome) <ul style="list-style-type: none"> • George Washington and Jefferson National Forest (723,472 ha) • Shenandoah National Park (80,062 ha) 2. Middle Atlantic Coastal Forest (Temperate Coniferous Forests biome) <ul style="list-style-type: none"> • Great Dismal Swamp National Wildlife Refuge (49,371 ha) • Holly shelter Game Land (26,200 ha) 3. Southeastern Mixed Forest (Temperate Broadleaf and Mixed Forests biome) <ul style="list-style-type: none"> • Patuxent Research Refuge (5,179 ha) • R Wayne Bailey - Caswell Game Land 96,487 ha) <p>Available external evidence exist to prove Enviva is an industry leader in conservation efforts as demonstrated by Enviva's Forest Conservation Fund. Enviva Forest Conservation Fund progress can be found on the Funds website: http://envivaforestfund.org/progress/</p> <p>Enviva's Controlled Wood Risk Assessment/Due Diligence System reviewed many data sources including those in indicator 2.1.2. As indicated in 2.1.2 the greatest threat to biodiversity in the supply base area is associated with conversion and degradations.</p> <p>USGS Protected Area Database indicates most at risk key ecosystems and habitats in the supply base area are protected by federal and state agencies.</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> Enviva has controls and procedures in place to ensure key ecosystems and habitats are conserved or set aside in their natural state.</p>
<p>Means of Verification</p>	<ol style="list-style-type: none"> a. Preamble citations b. Enviva Forest Conservation Fund c. ENV-SFIS-01 Certified Sourcing Implementation Manual d. Master Wood Products Agreement e. State specific Natural Heritage Area web sites f. ENV-COC-01 Implementation Manual g. ENV-COC-02 CS Procedure h. ENV-COC-03 CS Risk Assessment i. State restoration programs j. United States Geological Survey Protected Area Database
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.2.4	The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> - Illegally harvest wood; - Wood harvested in violation of traditional and civil rights; - <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> - <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> - Wood from forests where genetically modified trees are planted; - Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement requires suppliers to avoid key ecosystems and habitats such as old growth forests and forest that could be threatened by forest management activities.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP</p>

supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.

Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

Enviva's processes are in alignment with SBP Guidance Document: Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.

Enviva engages with interested stakeholders through its Bottomland Hardwood Working Group to evaluate forest management and harvesting techniques for bottomland forests to ensure the best information is used in sourcing decisions.

Enviva actively engages environmental organizations like The Nature Conservancy to discuss strategies that improve forest management activities.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Procedure

Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices and biodiversity protection efforts in all of Enviva's supply area.

Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement

Evidence

Enviva Controlled Wood/Controlled Sources Risk assessment is reviewed in annual third party audits.

Available external evidence exist to prove Enviva is an industry leader in conservation efforts as demonstrated by Enviva's Forest Conservation Fund.

Enviva's Controlled Wood Risk Assessment/Due Diligence System reviewed many data sources including those in indicator 2.1.2. As indicated in 2.1.2 the greatest threat to biodiversity in the supply base area is associated with conversion and degradations. Active forest management and proper management of the forest resources, provide connectivity and important habitat, as well as alternative land uses for private forest owners seeking income from their land.

	<p>A large number of stakeholders have long been involved in the promotion of good forestry practices. These include most states’ forestry departments (known in most southern states as “Forestry Commissions”) which typically administer Forest Stewardship Programs. This program supports natural resource planning on private non-industrial forest lands.</p> <p>Perhaps the largest and most-active stakeholder groups are the various “Forestry Associations” which advocate active forestry practices in extensive, long-standing outreach, education, and lobbying efforts. Each state within the supply area has developed a wildlife action plan and a state-wide forestry strategy. Both sets of documents were developed using extensive stakeholder input processes, and the reports advocate continued active forestry by private landowners, in part to provide incentives to keep forests as forests. They also list many ongoing and some proposed conservation efforts and show widespread support for conservation of biodiversity and of diverse, productive forests.</p> <p>Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.</p> <p>Track & Trace records</p> <p>District of Origin records</p> <p>HCV Tract Approval Process records</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> There is a low risk sourcing practices will affect biodiversity protection efforts.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. Track & Trace Program d. ENV-COC-01 Implementation Manual e. ENV-COC-02 CS Procedure f. ENV-COC-03 CS Risk Assessment g. Master Wood Purchase Agreement h. Track & Trace i. District of Origin Process j. HCV Tract Approval Process k. State BMP Manuals and BMP monitoring data
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.2.5	The Biomass Producer has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises harm to ecosystems.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> - Illegally harvest wood; - Wood harvested in violation of traditional and civil rights; - <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> - Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; - Wood from forests where genetically modified trees are planted; - Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement also requires suppliers to use and require the use of forestry best management practices in their sourcing efforts. The use of forestry best management practices is the best way to minimize harm to the ecosystem.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP</p>

	<p>supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.</p> <p>Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.</p> <p>Enviva's processes are in alignment with SBP Guidance Document: <u>Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.</u></p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices in all of Enviva's supply area.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u></p> <p>The NASF website contains many useful reports including, <i>Effectiveness of forestry BMP's in the United States: Literature Review</i>. Published in Forest Ecology and Management (2016, pgs 133 - 151). The review determined forestry BMP's are effective when implemented as recommended by state forestry agencies. Proper implementation of forestry BMP's protect soil quality.</p> <p>There are few studies looking at the effect of timber harvesting on forest soils in the United States. The United States Department of Agriculture Forest Service General Technical Report INT-69 titled, <i>Forest Soil Biology - Timber Harvesting Relationships: A Perspective</i>, concluded generally timber harvesting does not have a long term impact on forest soil productivity and if changes do exist these are generally small and only last a few years.</p> <p>Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.</p> <p>Track & trace records</p> <p>District of Origin records</p> <p>HCV Tract Approval Process records</p> <p>Signed Master Wood Purchase Agreements</p>
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	<p><u>Conclusion</u> Enviva has processes to ensure the removal of residues does not harm ecosystems.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation d. ENV-COC-02 Controlled Sourcing Procedure e. ENV-COC-03 Controlled Sources Risk Assessment f. Master Wood Purchase Agreement g. Track & Trace h. District of Origin Process i. HCV Tract Approval Process j. State BMP Manuals and BMP monitoring data o. BMP implementation rate information for states in supply base area p. Effectiveness of forestry BMP's in the United States: Literature Review. k. Forest Soil Biology - Timber Harvesting Relationships: A Perspective l. The Nature Conservancy
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.2.6	<p>The Biomass Producer has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).</p>
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> - <u>Illegally harvest wood;</u> - <u>Wood harvested in violation of traditional and civil rights;</u> - <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> - <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> - <u>Wood from forests were genetically modified trees are planted;</u> - <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement. The Agreement requires suppliers to abide by forest management activities regulations.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP</p>

	<p>supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.</p> <p>Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.</p> <p>Enviva's processes are in alignment with SBP Guidance Document: <u>Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.</u></p> <p>Enviva engages with interested stakeholders through its Bottomland Hardwood Working Group to evaluate forest management and harvesting techniques for bottomland forests to ensure the best information is used in sourcing decisions.</p> <p>Enviva actively engages environmental organizations like The Nature Conservancy to discuss strategies that improve forest management activities.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure Enviva is aware of forest impact assessments, planning implementation and monitoring efforts including forestry best management practices all of Enviva's supply area. A review of BMP implementation rates is included.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement</p> <p><u>Evidence</u> Each State Forestry Agency/Commission is responsible for implementing forestry BMP's as directed by the Clean Water Act and conducting periodic BMP implementation monitoring. State-wide BMP compliance reports are readily available.</p> <p>The US Clean Water Act requires each state to develop non-point source BMP's to address run off. This includes forestry activities. Enviva's contracts require suppliers to ensure their supply chain follows all applicable laws including those that protect special habitats by following BMP's and other laws.</p> <p>Enviva's Controlled Wood Risk Assessment/ Due Diligence System and SFI Wood Sourcing Program requires monitoring and assessment of the impacts forestry has on water quality. Enviva works with state Sustainable Forestry Initiative Committees (SIC) to promote BMP compliance and education.</p> <p>Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.</p> <p>Track & Trace records</p> <p>District of Origin records</p>
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	<p>HCV Tract Approval Process records</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> There is a low risk sourcing practices will have a negative impact on water quality.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. State BMP Manuals and BMP monitoring data d. Master Wood Purchase Agreement e. Track & Trace f. District of Origin g. HCV Tract Approval Process h. NASF Water Quality Report
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.2.7	The Biomass Producer has implemented appropriate control systems and procedures for verifying that air quality is not adversely affected by forest management activities.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> - <u>Illegally harvest wood</u>; - Wood harvested in violation of traditional and civil rights; - Wood harvested from forests where high conservation values are threatened by management activities; - Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; - Wood from forests where genetically modified trees are planted; - Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement. The Agreement requires suppliers to abide by forest management activities regulations.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.</p>

Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

Enviva's processes are in alignment with SBP Guidance Document: [Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.](#)

Procedure

Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices in all of Enviva's supply area.

Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Evidence

Enviva is a member of regional state forestry associations responsible for reviewing and developing logger training in conjunction with state forestry associations related to forestry best manage practices. Enviva interacts with these groups to improve forestry best management practices guidelines and monitor enforcement.

In the United States regulation of forestry practices has its roots in federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations and ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law. Chemical use in forest management activities also follow EPA guidance under FIFRA and include in-woods practices. A review of the EPA Civil Cases and Settlements by Statute has no findings related to forest management activities in 2017. The United States has a robust legal system that deters the abuse of state and Federal regulation.

The US Clean Air Act requires each state to implement air quality controls to ensure the public's safety. The USDA Forest Service website, *Forest Service Air Management Responsibilities* describes how the Clean Air Act affects forestry operations in general. States in the supply base area have haze/smoke laws.

In the United States regulation of forestry practices has its roots in federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations and ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law. Air quality regulations are controlled by the EPA and these regulations also influence in-wood practices including air quality impact from forest management activities. A review of the EPA Civil Cases and Settlements by Statute has no findings related to forest management

	<p>activities in 2017. The United States has a robust legal system that deters the abuse of state and federal regulation.</p> <p>States in the supply area have regulations governing the use of fire as a silviculture management tool. http://ncforestservice.gov/fire_control/fc_prescribedfire.htm https://www.state.sc.us/forest/smg05.pdf http://www.dof.virginia.gov/fire/prescribed/index.htm</p> <p>Examples of enforcement of forestry fire laws can be found on the United States Fire Administration website https://www.usfa.fema.gov/prevention/outreach/wildfire_arson/court_cases.html).</p> <p>And the US Environmental Protection Agency website https://cfpub.epa.gov/compliance/criminal_prosecution/).</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> There is a low risk sourcing practices will have a negative impact on air quality</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. Master Wood Purchase Agreement c. Track & trace d. District of Origin e. HCV Tract Approval Process f. Clean Air Act g. State Forestry Regulations h. USDA Forest Service i. US EPA j. US Fire Administration k. World Bank
<p>Evidence Reviewed</p>	
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.2.8	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is controlled and appropriate use of chemicals, and that Integrated Pest Management (IPM) is implemented wherever possible in forest management activities (CPET S5c).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood:</p> <ul style="list-style-type: none"> - <u>Illegally harvest wood:</u> - Wood harvested in violation of traditional and civil rights; - Wood harvested from forests where high conservation values are threatened by management activities; - Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; - Wood from forests where genetically modified trees are planted; - Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>Enviva requires all suppliers to sign an annual Master Wood Supply Agreement. The Agreement requires suppliers to abide by forest management activities regulations.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.</p>

Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

Enviva's processes are in alignment with SBP Guidance Document: [Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.](#)

Procedure

Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices in all of Enviva's supply area. The use of chemical in forest management practices are regulated.

Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Evidence

Enviva is a member of regional state forestry associations. Enviva interacts with these groups to engage landowners in best forestry management practices.

In the United States regulation of forestry practices has its roots in federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations and ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law. Chemical use in forest management activities also follow EPA guidance under FIFRA and include in-woods practices. A review of the EPA Civil Cases and Settlements by Statute has no findings related to forest management activities in 2017. The United States has a robust legal system that deters the abuse of state and Federal regulation.

Examples of enforcement of Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) can be found on the United States Environmental Protection Agency website (https://cfpub.epa.gov/compliance/criminal_prosecution/).

Enviva purchase low grade wood from timber harvesting which is often diseased or insect damaged. Removing this wood improves forest health and reduces the need for chemical treatments.

Information about Integrated Pest Management can be found on the USDA Forest Service website (<https://www.fs.fed.us/foresthealth/protecting-forest/integrated-pest-management/>).

Signed Master Wood Purchase Agreements

	<p><u>Conclusion</u> There is a low risk sourcing practices will cause an increase in the use of pesticides or herbicides.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. Master Wood Purchase Agreement c. Track & Trace d. District of Origin e. HCV Tract Approval Process f. Clean Air Act g. USDA Forest Service h. Federal Insecticide, Fungicide and Rodenticide Act i. US EPA j. World Bank
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.2.9	The Biomass Producer has implemented appropriate control systems and procedures for verifying that methods of waste disposal minimise negative impacts on forest ecosystems (CPET S5d).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood:</p> <ul style="list-style-type: none"> - <u>Illegally harvest wood;</u> - Wood harvested in violation of traditional and civil rights; - Wood harvested from forests where high conservation values are threatened by management activities; - Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; - Wood from forests where genetically modified trees are planted; - Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement also requires suppliers to use and require the use of forestry best management practices in their sourcing efforts. Forestry best management practices are the best tool to protect forest from waste disposal.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva’s Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract’s ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP supply base evaluation process and that the suppliers’ sourcing practices do not pose a threat to these areas.</p>

	<p>Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.</p> <p>Enviva's processes are in alignment with SBP Guidance Document: <u>Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.</u></p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The use of forestry best management practices is part of the review</p> <p>Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> Enviva is a member of regional state forestry associations. Enviva interacts with these groups to engage landowners in best forestry management practices.</p> <p>Enviva's SFI Wood Sourcing Program requires primary suppliers to adhere to all applicable laws and regulations. State BMPs require the removal of trash.</p> <p>Signed Master Wood Purchase Agreements</p> <p>Track & Trace records</p> <p>District of Origin records</p> <p>HCV Tract Approval Process records</p> <p><u>Conclusion</u> There is a low risk sourcing practices will harm forest due to waste disposal.</p>
<p>Means of Verification</p>	<ol style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. Master Wood Purchase Agreement d. Track & Trace e. District of Origin f. HCV Tract Approval Process g. State BMP Manuals and monitoring data h. NASF Water Quality Report i. State BMP Manuals and monitoring data
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>

Risk Rating	<input checked="" type="checkbox"/> Low Risk	<input type="checkbox"/> Specified Risk	<input type="checkbox"/> Unspecified Risk at RA
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	Indicator																																																																						
2.3.1	Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data.																																																																						
Finding	<p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices in all of Enviva's supply area. The annual review requires an analysis of growth to drain in the supply area.</p> <p><u>Evidence</u> A 2015 Forest2Market report titled <i>Wood Supply Market Trends in the US South</i> concluded that in 2014, the total wood consumption for all markets in the south was only 3.3% of total forest inventory. Removals for pellet production represents 0.3% of all the US South standing inventory.</p> <div data-bbox="555 887 1225 1223" data-label="Figure"> <table border="1"> <caption>Harvest Trends in Enviva Mid-Atlantic Regional Supply Base (Million Green Short Tons)</caption> <thead> <tr> <th>Year</th> <th>Pine Pulpwood</th> <th>Pine Sawtimber</th> <th>Hardwood Pulpwood</th> <th>Hardwood Sawtimber</th> </tr> </thead> <tbody> <tr><td>2002</td><td>5.0</td><td>5.0</td><td>3.5</td><td>2.5</td></tr> <tr><td>2003</td><td>5.0</td><td>4.8</td><td>3.8</td><td>2.5</td></tr> <tr><td>2004</td><td>5.0</td><td>4.8</td><td>4.0</td><td>2.2</td></tr> <tr><td>2005</td><td>5.0</td><td>4.8</td><td>4.2</td><td>2.0</td></tr> <tr><td>2006</td><td>5.2</td><td>4.8</td><td>4.0</td><td>2.0</td></tr> <tr><td>2007</td><td>5.5</td><td>4.5</td><td>3.2</td><td>1.8</td></tr> <tr><td>2008</td><td>6.0</td><td>3.5</td><td>3.5</td><td>1.5</td></tr> <tr><td>2009</td><td>5.8</td><td>3.0</td><td>2.8</td><td>1.2</td></tr> <tr><td>2010</td><td>6.2</td><td>3.0</td><td>2.0</td><td>1.0</td></tr> <tr><td>2011</td><td>6.2</td><td>3.2</td><td>1.5</td><td>0.8</td></tr> <tr><td>2012</td><td>6.8</td><td>3.2</td><td>1.8</td><td>0.8</td></tr> <tr><td>2013</td><td>7.5</td><td>3.5</td><td>2.5</td><td>0.8</td></tr> <tr><td>2014</td><td>7.5</td><td>3.5</td><td>3.5</td><td>0.8</td></tr> </tbody> </table> </div> <p>The most recently available inventory data from the US Forest Service's Forest Inventory and Analysis program shows that the growth to drain ratio for hardwood in the supply base area is 2.41:1, meaning that net hardwood inventories are increasing and current harvest levels for this product are sustainable. The growth to drain ratio for pine in the region is 1.86:1 (US Department of Agriculture Forest Service, 2017). Enviva's sourcing does not compete with other forest product industries: instead, it provides a market for low value forest products produced during harvests for high-value timber</p> <p>The procurement of wood material contributes to reducing environmental impacts and enhancing the productivity of forests. A 2017 Forest2Market report, <i>Historic Perspectives on the Relationship between Demand and Forest Productivity in the US South</i>, concluded further that a positive relationship exists between forest harvest and forest growth, proving that forest landowners respond to robust forest products markets by planting more trees. Markets for low valued wood products allow for more efficient site preparation and reforestation.</p> <p><u>Conclusion</u> There is a low risk sourcing practices will harm growth to drain levels in the supply area.</p>	Year	Pine Pulpwood	Pine Sawtimber	Hardwood Pulpwood	Hardwood Sawtimber	2002	5.0	5.0	3.5	2.5	2003	5.0	4.8	3.8	2.5	2004	5.0	4.8	4.0	2.2	2005	5.0	4.8	4.2	2.0	2006	5.2	4.8	4.0	2.0	2007	5.5	4.5	3.2	1.8	2008	6.0	3.5	3.5	1.5	2009	5.8	3.0	2.8	1.2	2010	6.2	3.0	2.0	1.0	2011	6.2	3.2	1.5	0.8	2012	6.8	3.2	1.8	0.8	2013	7.5	3.5	2.5	0.8	2014	7.5	3.5	3.5	0.8
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	<p>e. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual f. ENV-COC-03 Controlled Sources Risk Assessment</p>
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.3.2	Adequate training is provided for all personnel, including employees and contractors (CPET S6d).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood:</p> <ul style="list-style-type: none"> • Illegally harvest wood; • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>The Master Wood Purchase Agreement also requires suppliers adhere to employment safety programs such as the Occupational Safety and Health Administration (OSHA).</p> <p>Enviva's internal Human Resources practices, Operational Excellence Management System and Safety Program ensure employees receive the proper training to perform their tasks safely.</p> <p><u>Evidence</u> Enviva conducts in-depth internal training for all employees. Enviva's staff have achieved educational levels appropriate with their specific job duties. (Training Records)</p> <p>Enviva's Master Wood Purchase Agreement require suppliers to ensure their supply chain follows all applicable laws including those that protect special habitats by following BMP's and other laws. Logger training can be verified via each state's logger training program website.</p> <p>Enviva's staff with Sustainable Biomass Program responsibility all have college/university degrees in Forestry or a related field. Other staff training may include:</p> <ul style="list-style-type: none"> • State level logger training to enhance understanding of state harvesting regulations and forestry BMP's; • Training in the structure and requirements of Enviva's SFI Wood Sourcing, and FSC/PEFC/SFI Chain of Custody systems; • Internal high conservation value area identification; • Track & Trace; • Climate change; • Community relations; and • Safety. <p>All on site contractors are vetted prior to signing work contracts including a review of their training and safety policies, OSHA 300 log, and other relevant records.</p> <p>State Logger Training websites</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u></p>

	Sourcing practices ensure adequate training is provided by Enviva, its contractors and suppliers.
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation d. ENV-COC-02 Controlled Sourcing Procedure e. Master Wood Purchase Agreement f. Staff training documentation g. Contractor training records h. State logger training websites
Evidence Reviewed	All means of verification reviewed
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.3.3	Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.
Finding	<p><u>Evidence</u> Regional employment data provides a snapshot of the social mixture of the region. Farming, fishing and forestry make up 0.2% of the total employment in the region. However, due to the nature of pellet production, it also supports other sectors such as transportation & material moving, production, installation, maintenance and repair, business and financial operations and office and administration occupations, which in total make up an additional 40% of the labor force. The mean income for the region is \$51,174 and mean income for the employment sector including Forestry is \$29,990 (United States Department of Labor, 2016). Mean income for an average mill worker in the region is \$34,255 (United States Department of Labor, 2016). Enviva employs directly approximately 350 people in the region. Further, Enviva’s operations supports an additional 170 various harvesting crews and saw mills, along with forest managers, feedstock and pellet transport. Local contractors are used in maintaining the mills, providing hundreds of spin-off jobs. Figure 4 illustrates employments by the major industrial groups for the two states included in the supply region (United States Department of Labor, 2016).</p> <p>According to a report created for Enviva by Chmura Economics & Analytics, the total annual economic impact (direct, indirect, and induced impacts) of the ongoing operation of the Ahoskie wood pellet manufacturing plant in North Carolina is estimated to be \$144.1 million (measured in 2013 dollars) which supports 222 state jobs. Aside from the direct impact, an additional indirect impact of \$46.4 million and 115 jobs will benefit other North Carolina businesses that support the plant’s operation, including local logging and trucking companies. The economic impact of the plant in Virginia is smaller, derived entirely from the indirect and induced impact. The indirect impact in Virginia is estimated to be \$12.4 million and 22 jobs per year in 2013, which benefits other Virginia businesses that support the plant’s operation, including local logging and trucking companies (Chmura Economics & Analytics, 2013).</p> <p><u>Conclusion</u> Evidence demonstrates the economic benefits of Enviva's presence in the supply area.</p>
Means of Verification	<ul style="list-style-type: none"> a. US Department of Labor b. ENV-COC-03 CS Risk Assessment c. Chmura Economics & Analytics
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.4.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest ecosystems are maintained or improved (CPET S7a).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> - Illegally harvest wood; - Wood harvested in violation of traditional and civil rights; - <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> - <u>Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use;</u> - Wood from forests where genetically modified trees are planted; - Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement also requires suppliers to use and require the use of forestry best management practices in their sourcing efforts. Forestry best management practices are the best tool to protect forest health.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP</p>

supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.

Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

Enviva's processes are in alignment with SBP Guidance Document: Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.

Enviva engages with interested stakeholders through its Bottomland Hardwood Working Group to evaluate forest management and harvesting techniques for bottomland forests to ensure the best information is used in sourcing decisions.

Enviva actively engages environmental organizations like The Nature Conservancy to discuss strategies that improve forest management activities.

Procedure

Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices in all of Enviva's supply area. The annual review requires a review of evidence to ensure harvesting practices do not harm forest health or vitality.

Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Evidence

The US Forest Service and State Forest Services undertake research into forest health, and their research results are readily available. The SFI Wood Sourcing Program requires Program Participants to individually or with others participate in research related to forest health issues. Markets for residual by-products benefit sawmills which in turn benefits forest landowners and helps support reforestation.

Enviva is also a member of the National Council on Air and Stream Improvement (NCASI). NCASI Technical Bulletin No. 982 and the 2014 update No. 1022 *Summary of Conservation Planning Efforts in Forested Regions of the United States: 2014 Update* describes conservation plans and initiatives states are undertaking to ensure forest health. The membership allows Enviva to stay informed of trends in forest health and interact with other in the wood products industry to develop useful research for the forest products sector.

Track & Trace records

	<p>District of Origin records</p> <p>HCV Tract Approval Process</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> There is a low risk sourcing practices will have a negative impact on forest health and vitality.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. ENV-COC-03 Controlled Sources Risk Assessment d. Track & Trace e. District of Origin f. HCV Tract Approval Process g. Master Wood Purchase Agreement h. USFS websites i. State Forest Service web sites j. NCASI Technical Bulletin No 982 & No. 1022 Summary of Conservation Planning Efforts in Forested Regions of the United States: 2014 Update
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.4.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • <u>Wood harvested from forests where high conservation values are threatened by management activities;</u> • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement also requires suppliers to use and require the use of forestry best management practices in their sourcing efforts. Forestry best management practices are the best tool to protect forest health</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva’s Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract’s ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP</p>

supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.

Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.

Enviva's processes are in alignment with SBP Guidance Document: [Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.](#)

Enviva engages with interested stakeholders through its Bottomland Hardwood Working Group to evaluate forest management and harvesting techniques for bottomland forests to ensure the best information is used in sourcing decisions.

Enviva actively engages environmental organizations like The Nature Conservancy to discuss strategies that improve forest management activities.

Procedure

Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices.

Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.

Evidence

Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.

Each state within the supply base area has a forest action plan in place that is designed to guide the work of forestry professionals to help manage, protect, enhance, and conserve forest resources within the state. These plans address forest pest, disease, and wildfire to insure healthy forest and are available on the National State Forester Website.

Examples of enforcement of forestry fire laws can be found on the United States Fire Administration website (https://www.usfa.fema.gov/prevention/outreach/wildfire_arson/court_cases.html).

Forest pest management information and controls can be found on the USDA Forest Service website (<https://www.fs.fed.us/foresthealth/protecting-forest/>) and includes information on plants, pathogens and insects.

These sites permit verification of program successes. Each state in the supply base area participates in these programs.

The procurement of wood material contributes to reducing environmental impacts and enhancing the productivity of forests. Markets for low valued wood products allow for

	<p>more efficient site preparation and reforestation and help with pest management by keeping forest healthy.</p> <p>Private landowners who manage their forests for timber typically work with consulting or state foresters (through landowner assistance programs) to create management plans for their forestland. Industrial land managers make similar management plans for the larger tracts of forest they own and manage. When it comes time for harvest, private landowners work either on their own or with consulting foresters to sell the rights to their timber to suppliers or loggers who then sell the harvested material to forest products companies like Enviva. Industrial landowners harvest and sell their tracts on their own and sometimes work with external logging crews. Given that Enviva does not have access to all these various forms of plans, we must rely on publically available information to show that forest productivity and other attributes are being maintained in the supply area.</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> Sourcing practices verify natural processes are appropriately managed.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. USDA Forest Service web site c. National State Foresters web site State Forest Action Plans d. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual e. ENV-COC-03 Controlled Sources Risk Assessment f. Master Wood Purchase Agreement g. Track & Trace h. District of Origin i. HCV Tract Approval Process
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.4.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is adequate protection of the forest from unauthorised activities, such as illegal logging, mining and encroachment (CPETS7c).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood:</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement is signed by each supplier annually.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva's Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract's ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p>Enviva's HCV Tract Approval Process ensures forest management activities do not harm sensitive eco-systems, habitats or threaten biodiversity in its sourcing practices. Each tract is assessed using a set of criteria that include the tract location within known bottomland forest settings. Every tract is evaluated for forest health concerns, wildlife considerations, location within the landscape, conservation value and other criteria. Enviva will only purchase wood from a tract if the assessment determines harvesting is the best outcome for the forest.</p> <p>Forestry BMP's are the best tool available to ensure forest management activities do not adversely impact forests and other areas of high conservation value. Enviva contractually requires the use of BMP's. Enviva's Track & Trace Program includes a harvest site auditing component to ensure suppliers conform to the requirement. The Forestry Commissions for each states in the supply area monitor and enforce BMP implementation.</p> <p><i>Secondary Feedstock</i> Enviva's Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP supply base evaluation process and that the suppliers' sourcing practices do not pose a threat to these areas.</p>

	<p>Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.</p> <p>Enviva's processes are in alignment with SBP Guidance Document: <u>Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.</u></p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices in all of Enviva's supply area. The review confirms adequate laws and regulations exist and are enforced in the supply area.</p> <p>Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States regulation of forestry practices has its roots in Federal law and in Acts designed to provide guidance to states for developing state specific laws and regulations. The US ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law. Evidence of the effectiveness of law enforcement is evident in news reporting and this reporting reveals no widespread or systematic criminal activity in the supply base area.</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> Laws and regulations are enforced in the United States and the supply area to ensure the potential for illegal logging, mining or other encroachment is a low risk.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation d. ENV-COC-03 Controlled Sources Risk Assessment e. Master Wood Purchase Agreement f. Track & Trace g. District of Origin h. HCV Tract Approval Process i. AHEC Legality Study j. World Bank
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>

Risk Rating	<input checked="" type="checkbox"/> Low Risk	<input type="checkbox"/> Specified Risk	<input type="checkbox"/> Unspecified Risk at RA
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	Indicator
2.5.1	<p>The Biomass Producer has implemented appropriate control systems and procedures for verifying that legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected (CPET S9).</p>
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • Illegally harvest wood; • <u>Wood harvested in violation of traditional and civil rights;</u> • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>The Master Wood Purchase Agreement is signed by each supplier annually.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva’s Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract’s ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p><i>Secondary Feedstock</i> Enviva’s Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP supply base evaluation process and that the suppliers’ sourcing practices do not pose a threat to these areas.</p> <p>Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.</p> <p>Enviva's processes are in alignment with SBP Guidance Document: <u>Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.</u></p> <p><u>Procedure</u></p>

	<p>Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The review includes an analysis of customary and traditional land use rights in the supply area.</p> <p>Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States regulation of forestry practices has its roots in federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations and ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>The US is an industrial nation that does not have people groups dependent on a particular site or resource for basic human need. Further, federal and State legislation governs Native Americans and their rights are strictly enforced. Because Enviva and its supplier's source from private forestlands there are no issues related to traditional use or tenure rights. Public lands are required to engage with stakeholders of all kinds to ensure harvests maintain the forest as a public good, including working with Native Americans. Native American reservations do exist within the supply base, but all are either under tribal or federal ownership. Enviva also has a formal process for receiving and responding to public inquiries, particularly those that potentially relate to practices that appear to be inconsistent with existing certification requirements.</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> There are adequate law and regulation in the United States and the supply base area to ensure there are no threats to traditional or customary land use rights.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. Federal and State laws and statutes c. Enviva Sustainability Policy d. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation e. Track & Trace f. District of Origin g. Master Wood Purchase Agreement h. World Bank
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.5.2	<p>The Biomass Producer has implemented appropriate control systems and procedures for verifying that production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfilment of basic needs.</p>
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • <u>Wood harvested in violation of traditional and civil rights;</u> • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement is signed by each supplier annually.</p> <p><i>Primary Feedstock</i> Enviva uses its proprietary Track & Trace for all primary wood purchases. Specifically, Enviva maintains a robust tracking and monitoring program to ensure that all our suppliers deliver wood that is sourced according to our expectations. The information Enviva collects for every tract its suppliers harvest includes; data on the forest type, age, GPS coordinates, acreage, and the percent of volume from that tract being sold to Enviva. Before agreeing to accept material from a certain tract, Enviva’s Procurement Foresters must obtain this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the mill, each load is linked to that tract’s ID number. As a result, Enviva knows the tract-level attributes for all the primary wood entering the mill.</p> <p><i>Secondary Feedstock</i> Enviva’s Secondary Supplier District of Origin procedure requires suppliers to annually provide information such as; their supply area radius, species used, information collected about source locations and forest worker training. This information is mapped against known areas with potential high conservation value to ensure that any risk to HCV values associated with suppliers of secondary feedstocks is appropriately included in the SBP supply base evaluation process and that the suppliers’ sourcing practices do not pose a threat to these areas.</p> <p>Enviva's annual District of Origin and Supplier Data Request Form process allows it to assess secondary feedstock mills as described in SBP's Normative Interpretations Document dated December 2017. The guidance found in Standard 2 Section 8.4 describes the procedures a Biomass Producer may use to ensure secondary feedstock sources can be proven SBP-compliant. The evidence collected and evaluated by Enviva to determine the risk of a supplier sourcing practices and supply area are low risk for all indicators.</p> <p>Enviva's processes are in alignment with SBP Guidance Document: <u>Meeting SBP Criteria in relation to protecting exceptional conservation values in the southern US.</u> <u>Procedure</u> Enviva’s Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The analysis includes a study of the existence of subsistence communities in the supply area.</p>

	<p>Enviva reviews sources such as the National Association of State Foresters, USFS Forest Inventory Analysis, World Wildlife Fund, Conservation International, Greenpeace and World Resources Institute to conduct a state by state study of its supply area. The analysis indicates there are ample state and regional forest assessment tools that help determine forestry regulations within the supply base area. The analysis determine the wood products industry is well established, logger training is an industry norm and the use of forestry best management practices are a business as usual practice in the supply base area.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> There are no subsistence communities sourcing basic needs from the forest in the supply base area.</p> <p>In the United States regulation of forestry practices has its roots in Federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations and ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>Certain Native American groups depend on clean water and healthy forest for their basic needs, but these areas are located either on publicly owned lands or on their own private reservations. On public lands, laws and regulations are in effect to protect the resources that these communities need.</p> <p>Forestry BMPs through the Clean Water Act are designed to protect water resources. Enviva, and its third-party suppliers, require through contracts, that all primary suppliers of raw material adhere to all applicable laws and regulations and employ BMPs during harvest. BMP compliance rates are high throughout the supply base. Enviva and its third party suppliers will not contract with companies exhibiting poor performance.</p> <p>The U.S. has a very low risk of food insecurity.</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> There is a low risk sourcing practices will impact a community relying on the forest for its subsistence.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. Federal and State web sites c. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual d. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation e. ENV-COC-02 Controlled Sourcing Procedure f. ENV-COC-03 Controlled Sources Risk Assessment g. Track & Trace h. District of Origin i. Master Wood Purchase Agreement j. State BMP Manuals and monitoring data k. NASF Water Quality Report l. World Bank
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.6.1	<p>The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.</p>
Finding	<p><u>Control system</u> Enviva has a formal grievance and complaints procedure in place as part of its PEFC Chain of Custody system</p> <p><u>Procedure</u> PEFC Chain of Custody required certificate holders to have a formal complaints procedure.</p> <p><u>Evidence</u> The Complaints Log is reviewed for accuracy during annually by a Certifying Body.</p> <p>In the United States has a robust legal system and well established laws and regulations protecting land use, tenure rights and forestry practices. The country ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>Federal Law regarding forestry dictate that: Forest fire fighting and forest fire prevention occupations, timber tract occupations, forestry service occupations, logging occupations, and occupations in the operation of any sawmill, lathe mill, shingle mill, or cooperage stock mill abide by (Order 4). [75 FR 28453, May 20, 2010]</p> <p>OSHA work rules ensure workers have a right to a safe workplace. The law requires employers to provide their employees with working conditions that are free of known dangers. The OSHA law also prohibits employers from retaliating against employees for exercising their rights under the law (including the right to raise a health and safety concern or report an injury). For more information see www.whistleblowers.gov or worker rights.</p> <p>AHEC reports that: “Forest employment in the US is regulated under federal and state laws and codes, which prohibit child labor and are consistent with the ILO Fundamental Principles and Rights at work.”</p> <p>The World Bank does not list the United States as a country with land use and tenure challenges. United States, federal and state legislation regarding worker health and safety is monitored by the Occupational Safety and Health Administration (OSHA) which provides good protection and strong recourse if safety protocols are breached. Enviva, and its third-party suppliers, require through contracts, that all suppliers of raw material adhere to all applicable laws and regulations. Enviva and its third party suppliers will not contract with companies exhibiting poor performance.</p> <p><u>Conclusion</u> Analysis confirms the existence and enforcement of appropriate laws and regulations governing grievances, disputes, tenure and use rights.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 SFI Certified Sourcing Implementation Manual c. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation d. ENV-COC-02 Controlled Sourcing Procedure e. ENV-COC-03 Controlled Sources Risk Assessment f. World Bank

Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.7.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that Freedom of Association and the effective recognition of the right to collective bargaining are respected.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood:</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>The Master Wood Purchase Agreement are signed by each supplier annually.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The analysis includes a review of appropriate laws regarding freedom of workers right to associate.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations. The nation ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>U.S. law clearly specifies rights to collective bargaining and freedom of association. Enviva's HR practices ensure worker rights are protected. All contracts contain verbiage requiring suppliers to conform to all applicable laws and annually Enviva sends supplier correspondence requiring its suppliers to comply with all labor laws. The United States ratified ILO C150 – Labor Administration Convention securing the rights of worker organization and collective bargaining. Verification of this and other ILO US Ratified Conventions can be found on the ILO NORMLEX website</p> <p>Enviva posts all of the US required employee information posters in key locations for all employees to see and read. Enviva's employee handbook describes the rights each worker enjoys including the right of free association and collective bargaining.</p> <p>The United States Department of Labor provides verification of enforcement. (https://www.dol.gov/general/aboutdol/majorlaws)</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> Analysis confirms the existence of appropriate laws and regulations governing workers right to associate.</p>

Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. Enviva HR policies and procedures c. Enviva Supplier correspondence d. ENV-COC-01-Implementation Manual e. ENV-COC-03 Controlled Wood Risk Assessment f. Enviva Employee Handbook g. Mill site employee postings h. Master Wood Purchase Agreement i. ILO US Ratified Conventions j. ILO NORMLEX Information System k. United States Department of Labor l. World Bank
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.7.2	<p>The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using any form of compulsory labour.</p>
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>The Master Wood Purchase Agreement are signed by each supplier annually.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The analysis includes a study of the existence of appropriate laws regarding protections from compulsory labor.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations. The nation ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>The U.S. supply areas where Enviva procures wood material have comprehensive laws prohibiting the use of compulsory labor or violating citizen's rights. Enviva's HR practices ensure worker rights are protected and employment is "at will". Enviva's PEFC Due Diligence Risk Assessment verifies "There is no evidence of child labor or violation of ILO Fundamental Principles and Rights at work taking place in forest areas in the district concerned."</p> <p>The United States Department of Labor provides verification of enforcement. (https://www.dol.gov/general/aboutdol/majorlaws)</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> Analysis confirms the existence of appropriate laws and regulations prohibiting compulsory labor.</p>
Means of Verification	<ol style="list-style-type: none"> a. Preamble citations b. Federal and State web sites c. Enviva HR policies and procedures d. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation e. ENV-COC-03 Controlled Wood Risk Assessment f. Master Wood Purchase Agreement

	<ul style="list-style-type: none"> g. ILO US Ratified Conventions h. United States Code i. United States Department of Labor j. World Bank
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.7.3	<p>The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is not supplied using child labour.</p>
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood:</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>The Master Wood Purchase Agreement are signed by each supplier annually.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed. The analysis includes a study of the existence of appropriate laws regarding protections preventing child labor.</p> <p><u>Evidence</u> In the United States federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations. The nation ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>The United States Department of Labor provides verification of enforcement. (https://www.dol.gov/general/topic/youthlabor/enforcement)</p> <p>The U.S. supply areas where Enviva procures wood material have comprehensive laws prohibiting the use of child labor or violating citizen's rights. Enviva's HR practices ensure the company complies with minimum worker age requirements and all supplier contracts contain verbiage requiring suppliers to conform to all applicable laws.</p> <p>From the AHEC Legality Study: "We come to the conclusion that wood procured in the study area can be considered Low Risk of violating traditional and civil rights. This conclusion is based on the determination that there is no UN Security Council ban, there is no evidence of prolific child labor, there is no evidence that ILO Fundamental Principles are not respected, and there are recognized and equitable processes in place to resolve conflicts of substantial magnitude."</p> <p>"Forest employment in the US is regulated under federal and state laws and codes, which prohibit child labor and are consistent with the ILO Fundamental Principles and Rights at work."</p> <p>Enviva does not employ anyone under the age or 18 years.</p> <p>Signed Master Wood Purchase Agreements</p>

	<p><u>Conclusion</u> Analysis confirms the existence of appropriate laws and regulations prohibiting child labor.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. Federal and State web sites c. Enviva HR policies and procedures d. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation e. ENV-COC-03 Controlled Wood Risk Assessment f. Master Wood Purchase Agreement g. ILO US Ratified Conventions h. United States Department of Labor i. World Bank
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.7.4	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using labour which is discriminated against in respect of employment and occupation.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood:</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>The Master Wood Purchase Agreement are signed by each supplier annually</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The analysis includes a study of the existence of appropriate laws regarding protections against discrimination in the workplace.</p> <p>In the United States federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations. The nation ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States regulation of forestry practices has its roots in federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations and ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>The U.S. supply areas where Enviva procures wood material have comprehensive laws prohibiting the violation of citizen's rights. Enviva's HR practices ensure the company is an equal opportunity employer and prohibit discrimination in all of the federal and state laws in our areas of operation. Enviva's PEFC Due Diligence Risk Assessment was verified to show "There is no evidence of child labor or violation of ILO Fundamental Principles and Rights at work taking place in forest areas in the district concerned."</p> <p>The United States Department of Labor provides verification of enforcement. (https://www.dol.gov/general/aboutdol/majorlaws)</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> Analysis confirms the existence of appropriate laws and regulations prohibiting discrimination in the workplace.</p>

Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. Federal and State web sites c. Enviva HR policies and procedures d. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation e. ENV-COC-03 Controlled Wood Risk Assessment f. Master Wood Purchase Agreement g. ILO US Ratified Conventions h. United States Department of Labor i. World Bank
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.7.5	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is supplied using labour where the pay and employment conditions are fair and meet, or exceed, minimum requirements.
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>The Master Wood Purchase Agreement are signed by each supplier annually.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The analysis includes a study of the existence of appropriate laws regarding minimum wage at the federal and state level.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations. The nation ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>The U.S. supply areas where Enviva procures wood material have comprehensive laws prohibiting the violation of worker's rights.</p> <p>Enviva's HR practices ensure worker wages are comparable to other similar employment opportunities in the regions we operate.</p> <p>Enviva's PEFC Due Diligence Risk Assessment was verified to show "There is no evidence of child labor or violation of ILO Fundamental Principles and Rights at work taking place in forest areas in the district concerned."</p> <p>OSHA work rules ensure workers have a right to a safe workplace. The law requires employers to provide their employees with working conditions that are free of known dangers. The OSHA law also prohibits employers from retaliating against employees for exercising their rights under the law (including the right to raise a health and safety concern or report an injury). For more information see www.whistleblowers.gov or worker rights.</p> <p>The United States Department of Labor provides verification of enforcement. (https://www.dol.gov/general/aboutdol/majorlaws)</p>

	<p>The United State Department of Labor Occupational Safety and Health Administration provides verification of enforcement. (https://www.osha.gov/dep/index.html)</p> <p>Signed Master Wood Purchase Agreements</p> <p><u>Conclusion</u> Analysis confirms the existence of appropriate laws and regulations ensuring fair pay for workers.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. Federal and State web sites c. Enviva HR policies and procedures d. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation e. ENV-COC-03 Controlled Wood Risk Assessment f. Master Wood Purchase Agreement g. ILO US Ratified Conventions h. Occupational Safety and Health Administration i. United States Department of Labor j. World Bank
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.8.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • Wood from forests where genetically modified trees are planted; • <u>Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work.</u> <p>The Master Wood Purchase Agreement are signed by each supplier annually.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The analysis includes a review of appropriate laws regarding worker health and safety.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> In the United States federal law and acts designed to provide minimum guidance to states in developing state specific laws and regulations. The nation ranks in the top 88th percentile in Regulatory Quality in the World Bank, Worldwide Governance Indicators and in the top 90th percentile in Rule of Law.</p> <p>The US Occupational Health and Safety Administration is responsible for implementing, monitoring and enforcing worker health and safety laws and regulations. Enviva complies with all applicable laws and regulation and contractually requires its suppliers to do the same.</p> <p>The SFI Wood Sourcing Standard requires Program Participants to adhere to health and safety laws. Enviva and its third party suppliers will not contract with companies exhibiting poor performance.</p> <p>Enviva has safety manuals in place for mill workers.</p> <p>Enviva also has an in-depth safety program in place at each mill to prevent accidents and share best practices amongst sites. OSHA records of reportable injuries and rates are publicly available.</p> <p>Federal Law regarding forestry dictate that: Forest fire fighting and forest fire prevention occupations, timber tract occupations, forestry service occupations, logging occupations, and occupations in the operation of any sawmill, lathe mill, shingle mill, or cooperage stock mill abide by (Order 4). [75 FR 28453, May 20, 2010]</p> <p>OSHA work rules ensure workers have a right to a safe workplace. The law requires employers to provide their employees with working conditions that are free of known</p>

	<p>dangers. The OSHA law also prohibits employers from retaliating against employees for exercising their rights under the law (including the right to raise a health and safety concern or report an injury). For more information see www.whistleblowers.gov or worker rights.</p> <p>The United State Department of Labor Occupational Safety and Health Administration provides verification of enforcement. (https://www.osha.gov/dep/index.html)</p> <p>Signed Master Wood Purchase Agreement</p> <p><u>Conclusion</u> Analysis confirms the existence of appropriate laws and regulations ensuring worker health and safety.</p>
<p>Means of Verification</p>	<ul style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation d. ENV-COC-03 Controlled Wood Risk Assessment e. Enviva Employee Handbook f. Master Wood Purchase Agreement g. United State Department of Labor Occupational Safety and Health h. World Bank
<p>Evidence Reviewed</p>	<p>All means of verification reviewed.</p>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.9.1	Biomass is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.
Finding	<p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices in all of Enviva's supply base area. The analysis includes a study of carbon stocks in the supply area.</p> <p><u>Evidence</u> Wetlands and peatlands are recognized as areas of high carbon stocks as well as areas of important ecological function. Where there are wetlands in the sourcing area, these are strongly protected by legislation to remain as wetlands through the Clean Water Act. No change can be made to the hydrology of wetlands without the permission of the Army Corps of Engineers, who oversee and implement CWA legislation.</p> <p>Forest cover type in the supply base area is 54% hardwood. The 46% pine portion is a combination of both naturally occurring and plantation pine (U.S. Department of Agriculture, 2018). Growth to drain is positive at 1.86:1 for pine species and 2.41:1 for hardwood species.</p> <p><u>Conclusion</u> Analysis confirms carbon stocks are maintained.</p> <p>Wetlands and peatlands are recognized as areas of high carbon stocks as well as areas of important ecological function. Wetlands such as swamps, ponds and bottoms are common within the supply base, but peatlands such as bogs and fens are usually associated with the Northeast United States and well outside of the supply base. The exception to this is Pocosin, which is the only Southeastern bog and is only found along the Atlantic coast from Virginia to Florida and not likely to occur within the supply base.</p> <p>http://water.epa.gov/type/wetlands/types_index.cfm</p> <p>While current BMP's are structured to allow selective harvesting within a wetland, guidelines are in place to protect wetland function and minimize site impacts during harvest. BMP's specifically do not allow forestry activities to alter the hydrologic conditions or drainage patterns of wetlands. By limiting harvest size and requiring leave trees and Streamside Management Zones within the wetland, BMP's work to maintain the carbon sink values associated with wetlands. The use of innovative harvesting techniques such as mat or shovel logging utilize concentrated skid trails and "mats" of felled wood to minimize ground disturbance during wetland harvest. It is common practice for logging slash to be left on site during wetland harvest and natural regeneration of the wetland takes place fairly quickly after harvest.</p>
Means of Verification	<ul style="list-style-type: none"> a.Preamble citations b.ENV-SFIS-01 Certified Sourcing Implementation Manual c.ENV-COC-01 Enviva Chain of Custody Procedures & Implementation d.BMP manuals and Compliance reports e.Clean Water Act f. USDA Forest Service Forest Inventory Analysis data
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA

	Indicator
2.9.2	Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.
Finding	<p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually to ensure it Enviva is aware of forest impact assessments, planning implementation and monitoring efforts, forestry best management practices in all of Enviva's supply base area. The analysis includes a study of carbon stocks in the supply area.</p> <p><u>Evidence</u> Forest cover type in the supply base area is 54% hardwood. The 46% pine portion is a combination of both naturally occurring and plantation pine (U.S. Department of Agriculture, 2018). Growth to drain is positive at 1.86:1 for pine species and 2.41:1 for hardwood species.</p> <p>Understanding the role of managed forests in forest-carbon relationships is an essential component of global carbon dynamics and greenhouse gas (GHG) reductions. The ability of forests to act as carbon storage pools (sinks) and prevent additional carbon from entering the atmosphere is a key factor in this relationship. Recent studies have shown that a “hands off” strategy of forest preservation may not always produce the desired climatic results, but sustainably managed forests can provide carbon sequestration and storage benefits as well as a range of environmental and social benefits such as timber and biomass production, clean water, wildlife habitat, and recreational opportunities. The UN Intergovernmental Panel on Climate Change (IPCC) acknowledged this in their Fourth Assessment Report: “In the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fiber or energy from the forest, will generate the largest sustained mitigation benefit.”</p> <p>Healthy and vigorously growing forests are efficient at capturing and storing atmospheric carbon, but older mature forests, while maintaining large carbon stores, have very low rates of additional carbon sequestration. If natural mortality is allowed to occur in these mature forests, they can actually become carbon emitters and lose the benefit of stored carbon. The harvest of forest resources from such stands provides a mechanism for capturing and utilizing stored carbon. Sustainable forest management practiced at the landscape level provides a mosaic of forest stands from young to old and maintains carbon sequestration potential of the forests. Mature stands are harvested and reforested while younger stands are managed to maintain vigor and held for future harvest. Forest management practices such as thinning and prescribed burning reduce the potential for stand mortality from natural disturbances and the carbon emissions associated with such disturbances. The decay of trees destroyed by wildfires, storms, insects and diseases emits stored carbon back into the atmosphere without any realized benefit. As long as harvests and mortality do not exceed net growth across the forest, carbon stocks will remain stable or increase through time. In the U.S. we have experienced over 70 continuous years of net forest growth exceeding removals and mortality, thus indicating forest management practices are having a positive impact on the long term storage of carbon. Forest Inventory Analysis (FIA) data shows that all states within the supply base area follow the U.S. trend of steady to increasing forested acres.</p> <p>Harvest and utilization of forest products have additional GHG reduction and carbon flow benefits beyond the forest that are often not realized in society. The premise of Enviva's operations is to utilize forest materials and residuals from wood processing facilities in order to produce renewable energy and lower GHG emissions. By accepting lower quality wood produced from forest thinnings, Enviva is promoting the sustainable forest</p>

	<p>management practices that are essential to forest-climate interactions. Energy obtained from forest biomass uses far less of the Earth’s stored carbon; therefore, the use of our wood pellets reduces the flow of fossil fuel based carbon emissions into the atmosphere. Solid wood products and wood based products used in construction, furniture, and other industries maintain their stored carbon for the life of the product. The reuse or recycling of these wood products only compounds their impact on carbon flow. It takes less energy (embodied energy) and thus less fossil fuel to process raw forest materials into useful products than it does for other materials such as steel, aluminum, concrete, or plastic. When wood products are used in place of these other materials, there exist a real substitution effect that serves to reduce overall societal carbon emissions.</p> <p>Sustainable forest management along with the additive effect of various wood use strategies, insure that forest operations have substantial carbon sequestration, storage, and substitution benefits that reduce global GHG emissions.</p> <p>Society of American Foresters, 2011, Managing forests because carbon matters: integrating energy, products, and land management policy, Supplement to Journal of Forestry, October/November 2011, Volume 109, Number 7S</p> <p>http://www.fs.fed.us/pnw/pubs/journals/pnw_2011_malmsheimer001.pdf</p> <p>http://www.woodforgood.com/assets/Downloads/AHEC%20Carbon%20Storage%20through%20Forest%20Management.pdf</p> <p>Forest Inventory Analysis Data: http://www.fia.fs.fed.us/</p> <p><u>Conclusion</u> Analysis confirms carbon stocks are maintained.</p>
Means of Verification	<ul style="list-style-type: none"> a. Preamble citations b. SAF Journal of Forestry c. Ecological objectives can be achieved with wood derived bioenergy (peer reviewed letter) d. AHEC article (peer reviewed) e. Forest Inventory Analysis Data
Evidence Reviewed	All means of verification reviewed
Risk Rating	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>

	Indicator
2.10.1	Genetically modified trees are not used
Finding	<p><u>Control system</u> Enviva uses contractual language in its Master Wood Purchase Agreement requiring supplier to abide by all relevant laws and regulations. The contract includes the requirement to avoid the following unacceptable sources wood: (items related to this indicator are underlined)</p> <ul style="list-style-type: none"> • <u>Illegally harvest wood;</u> • Wood harvested in violation of traditional and civil rights; • Wood harvested from forests where high conservation values are threatened by management activities; • Wood harvested from old growth or semi-natural forests being converted to plantations or non-forest use; • <u>Wood from forests were genetically modified trees are planted;</u> • Wood in which there was a violation of the ILO Declarations on fundamental principle and rights at work. <p>The Master Wood Purchase Agreement are signed by each supplier annually.</p> <p><u>Procedure</u> Enviva's Controlled Wood/Controlled Sources Risk Assessment is reviewed annually. The analysis includes confirmation there are no genetically modified trees entering the mill.</p> <p>Findings are incorporated into Enviva's Controlled Wood/Controlled Sources Risk Assessment and revisions to the Master Wood Purchase Agreement.</p> <p><u>Evidence</u> There are no commercial uses of Genetically Modified Organisms (GMO's) inside the Enviva LP supply area. Enviva communicates its desire to avoid these source annually to its suppliers. Excerpt from Enviva's PEFC Chain of Custody Due Diligence System:</p> <p>"International groups have general consistency regarding the term GMO to ensure that it is not confused with hybrids, cultivars, and breeds, which are derived from traditional breeding programs. A GMO is an organism that has been transformed by the insertion of one or more genes (called transgenes). Often the inserted genes are from a different species than the recipient organism. Genetic modification does not include traditional breeding or natural hybridization, i.e. GM trees cannot be obtained through conventional tree breeding methods."</p> <p>There is a single synthesis document that provides an up to date (as of 2004) evaluation of forest GMO (Genetically Modified Organisms). Currently, the only commercial user of GMO trees is China and only a single species, Populus nigra (Black Poplar, Lombardy Poplar).</p> <p>Enviva did not find its wood supply areas on any lists contained in the FAO preliminary review of biotechnology in forestry (http://www.fao.org/docrep/008/ae574e/ae574e00.htm).</p> <p>There are no commercial uses of genetically modified trees taking place across the wood supply area. Enviva is therefore confident that its wood supply does not source wood from forests in which genetically modified trees are planted.</p> <p>FSC-CNRA-USA findings of low risk for genetically modified organisms in the United States.</p>

Means of Verification	<ul style="list-style-type: none"> a. ENV-COC-01 Enviva Chain of Custody Procedures & Implementation b. ENV-COC-03 Controlled Wood Risk Assessment c. Master Wood Purchase Agreement d. FSC U.S. in its Draft Guidance on Controlled Wood Sources e. Food and Agriculture Organization f. FSC-CNRA-USA
Evidence Reviewed	All means of verification reviewed.
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA