



SCS Global Services Evaluation of Enviva Pellets Amory, LLC Compliance with the SBP Framework: Public Summary Report

Third Surveillance Audit

Scope Change Audit

www.sbp-cert.org



The promise of good biomass



Completed in accordance with the CB Public Summary Report Template Version 1.4

*For further information on the SBP Framework and to view the full set of documentation see
www.sbp-cert.org*

Document history

Version 1.0: published 26 March 2015

Version 1.1: published 30 January 2018

Version 1.2: published 4 April 2018

Version 1.3: published 10 May 2018

Version 1.4: published 16 August 2018

© Copyright The Sustainable Biomass Program Limited 2018

Table of Contents

1	Overview
2	Scope of the evaluation and SBP certificate
3	Specific objective
4	SBP Standards utilised
4.1	SBP Standards utilised
4.2	SBP-endorsed Regional Risk Assessment
5	Description of Company, Supply Base and Forest Management
5.1	Description of Company
5.2	Description of Company's Supply Base
5.3	Detailed description of Supply Base
5.4	Chain of Custody system
6	Evaluation process
6.1	Timing of evaluation activities
6.2	Description of evaluation activities
6.3	Process for consultation with stakeholders
7	Results
7.1	Main strengths and weaknesses
7.2	Rigour of Supply Base Evaluation
7.3	Compilation of data on Greenhouse Gas emissions
7.4	Competency of involved personnel
7.5	Stakeholder feedback
7.6	Preconditions
8	Review of Company's Risk Assessments
9	Review of Company's mitigation measures
10	Non-conformities and observations
11	Certification recommendation

1 Overview

CB Name and contact: SCS Global Services, 2000 Powell St. Ste 600 Emeryville, CA 94608

Primary contact for SBP: Maggie Schwartz, mschwartz@scsglobalservices.com

Current report completion date: 01/Jul/2020

Report authors: Kyle Meister

Name of the Company: Enviva Pellets Amory, LLC

Company contact for SBP: Don Grant, Don.Grant@envivabiomass.com

Certified Supply Base: Select counties in Alabama, Arkansas, Louisiana, Mississippi, and Tennessee in the United States

SBP Certificate Code: SBP-04-12

Date of certificate issue: 28/Jun/2018

Date of certificate expiry: 27/Jun/2023

This report relates to the Third Surveillance Audit & Scope Change Audit

2 Scope of the evaluation and SBP certificate

This certificate covers the production of wood pellets, for use in energy production, at Enviva Pellets Amory and transport to the port of Mobile, AL for storage, aggregation, and vessel loading. It also covers a Supply Base Evaluation for the sourcing of feedstock from portions of eight states in the southern United States including; Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. The scope includes communication of Dynamic Batch Sustainability (DBS) Data.

The scope of this surveillance audit included an assessment of conformance to procedures, documentation, records and databases to ensure the organization's management system can continue to ensure conformance to SBP Standards 1, 2, 4, and 5. Audit methods used were field audits, remote inspection of the pellet mill, and interviews with relevant staff and supplier representatives. The evaluation included a review of documentation such as the Supply Base Report, including the Risk Assessment, PEFC DDS, supplier contracts and SAR, among others.

3 Specific objective

The specific objective of this evaluation was to confirm that the Biomass Producer’s management system is capable of ensuring that all requirements of specified SBP Standards are implemented over scope of certification.

The following Critical Control Points (CCPs) were identified and evaluated (edit list as appropriate and describe how the organization controls each point and how it was evaluated). Note that you may identify other CCPs for a particular client which you should also describe in the report:

CCP	Description, including how evaluated by SCS
Processes for procurement and processing, transport and storage	<p>All wood delivered to the mill is tracked in a centralized system. Prior to delivery of in-woods chips or mill residuals (e.g., wood chips, saw dust or shavings) to the scale house, the owner name, district of origin (Lat/Long), product type, etc. are obtained from the supplier. This was confirmed via review of procedures, supplier documentation, and the BP’s chain of custody credit accounts.</p> <p>All input feedstock is processed into wood pellets by being chipped, dried (if green), hammered, and extruded into pellets. The conversion factors used to allocate input feedstock into pellets are maintained and evaluated by BP staff. This was confirmed via remote inspection of the pellet mill, review of the FSC/PEFC COC report, and interviews with staff.</p>
Volume accounting method	<p>The procedures detail the process to properly maintain the volume credit spreadsheet, with provisions for subtracting certified product sold and for carrying only the past 12 months of credits. This was confirmed via review of the credit account and DTS records.</p>
Documentation of transactions	<p>Invoices are issued, and all outgoing transactions of SBP-certified biomass are recorded in the DTS, which was confirmed via review of DTS records.</p>
Energy data collection and reporting	<p>The organization developed and maintains databases to record data values and calculate energy data as required by Standard 5 and keeps records that substantiate the data.</p>

4 SBP Standards utilised

4.1 SBP Standards utilised

Please select all SBP Standards used during this evaluation. All Standards can be accessed and downloaded from <https://sbp-cert.org/documents/standards-documents/standards>

- SBP Framework Standard 1: Feedstock Compliance Standard (Version 1.0, 26 March 2015)
- SBP Framework Standard 2: Verification of SBP-compliant Feedstock (Version 1.0, 26 March 2015)
- SBP Framework Standard 4: Chain of Custody (Version 1.0, 26 March 2015)
- SBP Framework Standard 5: Collection and Communication of Data (Version 1.0, 26 March 2015)

4.2 SBP-endorsed Regional Risk Assessment

- Name of SBP-endorsed Regional Risk Assessment:
- N/A, no SBP-endorsed Regional Risk Assessment.

5 Description of Company, Supply Base and Forest Management

5.1 Description of Company

Enviva Holdings, LP (“Enviva”) owns and operates several plants in the south-eastern United States. The Amory mill uses feedstock that originates from three basic sources: primary feedstock sourced directly from the forest in the form of in-woods chips, and secondary and tertiary feedstock (mill residuals) such as woodchips, sawdust and shavings.

The organisation is a legal entity located in: Mississippi, United States of America

The following descriptions and activities apply to the organisation:

Biomass activity	Feedstock sourced <input type="checkbox"/> NA, trader only	Feedstock claims* <input type="checkbox"/> NA, trader only	Relationship to other SBP-certified biomass producers/traders
<input checked="" type="checkbox"/> Pellet producer & trader <input type="checkbox"/> Stationary/ <input type="checkbox"/> Mobile <input type="checkbox"/> Woodchip producer & trader <input type="checkbox"/> Pellet trader <input type="checkbox"/> Woodchip trader	<input checked="" type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary <input checked="" type="checkbox"/> Pre/ <input type="checkbox"/> Post-consumer tertiary	<input checked="" type="checkbox"/> FSC 100%/Mix Credit <input type="checkbox"/> FSC Mix x% <input checked="" type="checkbox"/> 100% PEFC/Volume Credit <input checked="" type="checkbox"/> SFI <input checked="" type="checkbox"/> ATFS <input type="checkbox"/> Other PEFC (e.g., CSA):	<input type="checkbox"/> NA, not linked via ownership and/or agreement to other SBP-certified entities; or <input checked="" type="checkbox"/> Organisation is linked to other SBP-certified entities via ownership or agreement: refer to all Enviva entities listed on the SBP certificate database .

*These refer to claims that the BP may most commonly accept under its chain of custody certificates, and not necessarily to claims actually received.

Feedstock is sourced from the following regions by administrative unit:Country(ies)	United States of America
States/Provinces/Territories	Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee
Number of counties/parishes sourced from in case only a portion of an administrative unit is in the SB	Alabama (58), Arkansas (27), Georgia (12), Kentucky (14), Louisiana (7), Mississippi (73), Missouri (12), and Tennessee (46)

5.2 Description of Company’s Supply Base

Brief description of the Supply Base within the regional context
Refer to expert from the BP’s SBR: <i>Enviva Holdings LP (“Enviva”) operates the Enviva Pellets Amory mill located in northeast Mississippi, USA. The supply base area for this facility includes counties from all or part of Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee in the southeast United States of</i>

America. Forestry and agriculture are the two predominate land uses in the supply area as well as the surrounding region (USDA Economic Research Service, 2017).

Forest cover-types and growth/drain ratios

The catchment area for Amory contains 21.3 million hectares of forested land. The annual growth to drain ratio of the supply base is 1.97:1 for all species, 2.03:1 for hardwood, and 1.94:1 for pine (USDA Forest Service, 2020). A growth to drain ratio that exceeds 1 indicates that annual forest growth exceeds annual harvest removals. In the Amory supply base area, total inventory has increased by an average of 1.3% annually between 2000 and 2016, more than a 20% increase in total fiber supply since 2000¹ (Figure 1). Also since 2000, US Forest Service Forest Inventory Analysis (FIA) data indicate an increase in forest area in the states covered included in the Amory supply base area (USDA Forest Service, 2020) (Figure 2).

Figure 1. Amory Supply Base Area Inventory, 2000-2016 (USDA Economic Research Service, 2020).

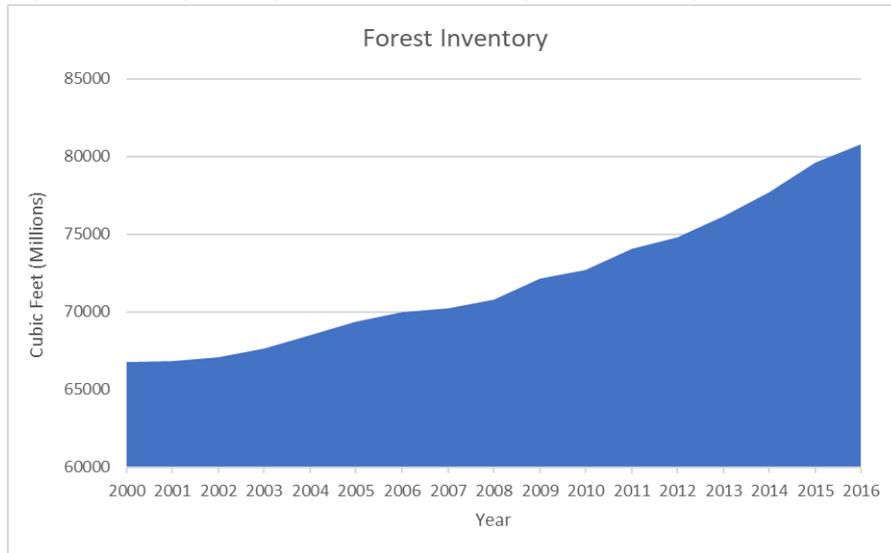
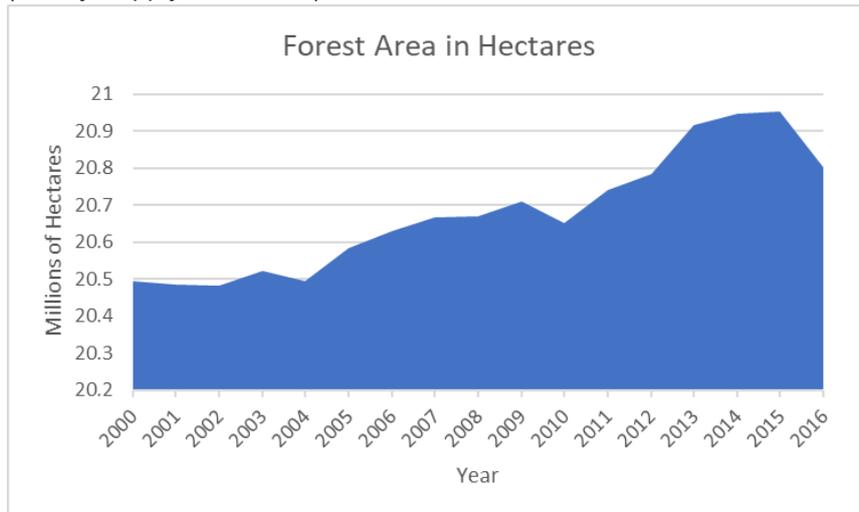


Figure 2. US Forest Service Timberland area in AL, AR, GA, KY, LA, MS, MO, and TN, 2000 – 2016 (Amory Supply Base Area)



¹ The most recently available (as of 2/25/2019) FIA data for 6 states: AL, FL, GA, MS, SC, TN was used in this analysis. For a detailed explanation of our methods, please visit our Forest Trend Map Data Sources & Methods page on our website: <http://www.envivabiomass.com/sustainability/track-and-trace/data-methods/>

The forest in the supply base consists primarily of southern yellow pine and mixed oak cover types. Forest species composition for each state within the supply base is described in Table 1 (USDA Forest Service, 2020).

Table 1. Forested hectares, Forest type by State in Supply Base Area

Forest Cover Type	AL	AR	GA	KY	LA	MO	MS	TN	Total
White/red/jack pine	6,740	0	0	0	0	0	0	3,029	9,769
Longleaf/slash pine	202,034	0	2,770	0	0	0	151,889	0	356,693
Loblolly/shortleaf pine	3,388,519	316,443	264,270	12,228	44,031	25,893	2,872,150	252,672	7,176,206
Other softwood	27,490	14,601	2,694	628	0	5,281	21,817	53,520	126,031
Pinyon/juniper	0	1,305	0	0	0	0	0	0	1,305
Oak/pine	958,144	79,663	85,700	9,188	11,678	37,476	639,307	174,263	1,995,419
Oak/hickory	2,468,250	499,160	323,562	314,682	45,647	458,187	1,630,420	1,839,041	7,578,949
Oak/gum/cypress	678,903	430,852	13,062	16,787	139,161	23,964	835,274	142,639	2,280,643
Elm/ash/cottonwood	236,946	243,539	16,419	68,711	122,138	47,814	434,678	274,976	1,445,222
Maple/beech/birch	0	0	0	13,829	0	11,408	0	37,688	62,925
Other hardwoods	2,747	3,246	554	0	732	2,139	6,938	7,926	24,282
Exotic hardwoods	17,360	97	0	1,156	0	0	21,337	7,260	47,210
Nonstocked	37,336	20,295	4,614	5,396	8,692	3,008	111,586	4,863	195,790
Total	8,024,469	1,609,201	713,645	442,603	372,080	615,170	6,725,396	2,797,877	21,300,442

Description of how the producer sources feedstock

Refer to expert from the BP's SBR:

Enviva's Commitment to Responsible Fiber Sourcing

Track & Trace®(T&T®)

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. We have developed a robust Track & Trace database which includes information at the tract level, including data on the forest type, age, GPS coordinates, acreage, and estimates on 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 and review this tract-level data and enter it into our database, which generates a unique tract ID. Then, upon delivery to the Amory 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.

We implement monitoring of our Track & Trace data, including a desktop remote-sensing based monitoring program, and field audits. During our desktop monitoring, we use Geographic Information Systems (GIS) to review tract details like location, tract acreage, and forest cover type. 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. Enviva only accepts wood from tracts in which the logger has completed and maintains training through a SFI-approved trained logger program.

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.

Secondary Feedstock

Enviva purchases sawmill and wood industry residues in the form of sawdust, shavings, or other waste products from the milling process (Figure 1). 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 District of Origin Form providing Enviva with information on the source of their wood supply 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 is accurate.

With this information, in addition to our internal expertise and knowledge of the location of the mill and the products it produces, Enviva can evaluate each supplier's ability to provide feedstock that meets the SBP Feedstock Standard. Enviva works with its residual suppliers to ensure the data they have provided is complete and accurate and will regularly check to ensure they are providing the material they have reported. In addition to an initial visit before signing a contract with a residual supplier to verify their operations and products are as-stated, Enviva can monitor the incoming products to ensure they are consistent with the data submitted annually in the Residual Supplier Data Sheet. Further, this data collection and monitoring process is now a part of Enviva's SBP implementation program, and thus is checked annually during certification audits.

Pellet Feedstock Profile

Primary feedstock is sourced direct from the forest in the form of roundwood or wood chips from 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, to follow best management practices for water quality, and to avoid controversial sources of wood supply, such as illegal logging. Enviva's fiber administrators confirm trained logger status and ensure that loggers delivering wood maintain their continuing education as required. All suppliers and loggers must also adhere to posted safety requirements while on Enviva property.

Primary feedstock from forest residues, such as treetops, 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 saw logs 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 Amory plant, the estimated 2020 pellet feedstocks should have the following characteristics:

- 79% should be made up of residues supplied by 54+/- sawmills and wood industries. 91% will be SBP-compliant and 30% will be certified. 9% will be from SBP-controlled sources from 14+/- wood industry suppliers.
- 21% should be made up of primary feedstocks from 2+/- suppliers. All of the supply will be SBP-compliant and 50% will be from certified forests.

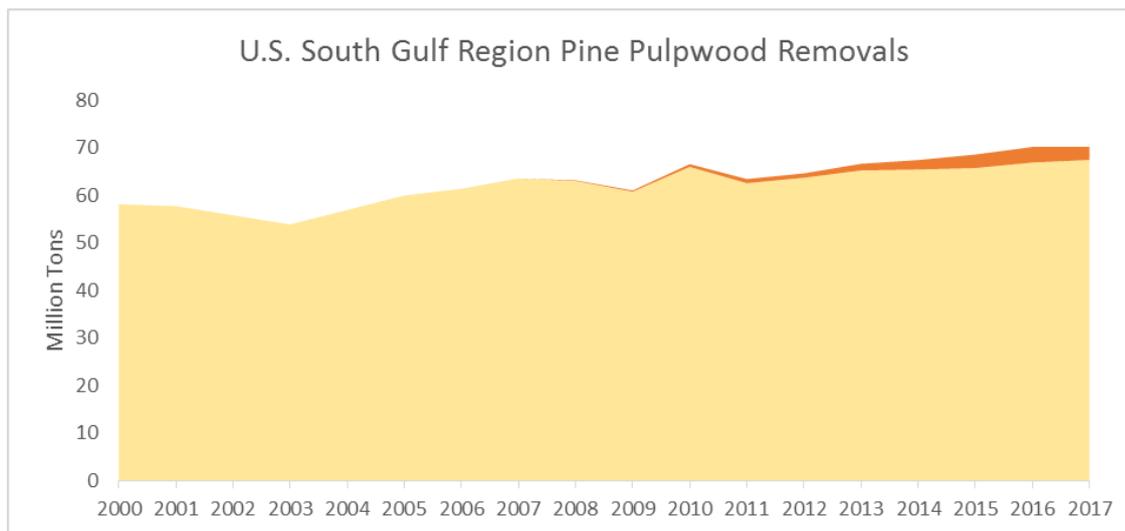
General description of the forest resources and forest management practices within the Supply Base (Land use, ownership, socioeconomic conditions, forest composition, and profile of adjacent lands)

Refer to the following excerpt from the SBR:

Operating Scale

Enviva is just one of several industries and entities sourcing wood in its supply base area. Removals of both pine and hardwood for pellet production in the Southern region comprised only 2.7% of total harvest volume in 2017. Primary harvesting activity and wood consumption in the South is driven by saw-timber markets, with total removals for the pellet industry comprising only 0.1% of the total pine inventory and 0.08% of the total hardwood inventory. In 2017, pine pulpwood removals for the entire pellet industry accounted for 3.8% of total pine pulpwood removals for all wood product classifications (Figure 3).²

Figure 3. U.S. South Gulf Region Pine Pulpwood Removals 2000 – 2017 (pellet removals are the orange wedge)



CITES, IUCN Species

Enviva maintains a third-party certified Forest Stewardship Council® (FSC) Controlled Wood Risk Assessment and Programme for the Endorsement of Forest Certifications™ (PEFC) Due Diligence System. These certifications provide a mechanism to evaluate the potential for use of CITES and/ or IUCN species concerns. The International Union for the Conservation of Nature (IUCN) Red List of Threatened Species includes Pinus palustris (International Union for the Conservation of Nature, 2018). Longleaf pine is included in the IUCN list because its current extent is much reduced from its historical range (Longleaf Alliance, 2016). The Longleaf Alliance supports the commercial viability of the species and encourages landowners to restore and continue to manage longleaf stands. To improve their condition, many longleaf stands need active management, particularly the removal of hardwood mid-story, and occasionally canopy thinning, to increase the amount of light that reaches the ground (fostering diverse, abundant ground story

² Derived from 2016-2017 Forest2Market Inc. data, which is not publicly available at this time.

plant community that is critical to wildlife habitat value) and to allow prescribed fire to be reintroduced as a management tool. Many of the mid-story and canopy trees that need to be removed are low-value and are thus often good biomass feedstocks. In fact, The Longleaf Alliance and Enviva just formed a five-year partnership, focusing on increasing restoration-oriented biomass sourcing from longleaf stands on public and private land as well as the implementation of the longleaf component of Enviva’s expanded HCV program. As part of our expanded HCV policy and procedures that Enviva will implement in 2020, Enviva will not source from identified, mapped longleaf stands that are being converted to another forest type.

General Forest Management Techniques

General forest management practices vary by landowner and location within the supply base and are conducted on both pine and hardwood sites. Most hardwood stands are naturally regenerated after harvest with little additional management taking place until the next harvest. Forest landowners can apply for many forms of federal, state and private assistance to replant trees, protect wildlife and sustainably manage their forest resources (USDA, 2019)

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.

Pine stands are both naturally regenerated and planted after harvest. Planted pine management includes various regimes designed to produce a variety of forest products. Typical management scenarios include a thinning between age 9 and 14, and a final harvest occurring between age 25 and 35. Pine management intensity depends on landowner objectives and resources, and could include additional treatments, and/or additional thinning. Many pine stands are established by planting then are not intensively managed. Once established they are left to grow and routinely have a hardwood dominated understory. This non-merchantable hardwood understory is used by Enviva Amory, if there is no other outlet for the wood.

Ownership, Land Use and Certification

Forest ownership patterns within the supply base are typical for the southern US, with the highest percentage of the forest owned by private landowners. Forest land ownership categories for each state in the supply base are presented in Table 2 (USDA Forest Service, 2020). The majority land use in the supply base area is generally agriculture or forestry. Land use data for the supply base is presented in Table 3 (USDA Economic Research Service, 2017). Major forest certification schemes such as the American Tree Farm System® (ATFS), Sustainable Forestry Initiative® (SFI®) and Forest Stewardship Council™ (FSC) have program participants within the supply base. From the states within the supply base, 10.6 million hectares are certified, 3.1 million hectares are ATFS certified, 6 million hectares are SFI certified, and 1.5 million hectares are FSC certified.

Table 2. Forested Hectares, Ownership by State in Supply Base Area

State	Federal	State & Local	Private	Total
AL	349,233	172,204	7,503,029	8,024,465
AR	111,973	124,289	1,372,941	1,609,202
GA	35,654	38,557	639,434	713,645
KY	54,806	13,221	374,576	442,604
LA	41,552	33,412	297,118	372,082
MO	147,756	50,928	416,487	615,171

MS	553,163	116,601	6,055,628	6,725,393
TN	104,877	161,102	2,531,894	2,797,873
Total	1,399,014	710,314	19,191,108	21,300,435

Table 3. Land Use by State (State-wide Basis)

State	Cropland	Grassland/Pasture	Forest	Special-use	Urban	Miscellaneous
Alabama	2,806	2,892	22,800	1,472	1,467	975
Arkansas	8,235	4,127	18,544	1,514	727	157
Georgia	4,385	1,680	24,352	1,946	3,207	1,238
Kentucky	6,369	4,742	11,886	1,237	928	109
Louisiana	4,585	2,275	14,645	2,022	1,299	2,825
Missouri	15,627	9,792	15,085	2,066	1,345	81
Mississippi	5,174	2,715	19,495	1,033	730	884
Tennessee	5,261	3,424	13,500	2,018	1,920	267

Regional Socio-economic Conditions

Annually the forest products industry in Mississippi generates over \$12 billion in revenue impacts and provides nearly 70,000 jobs (Mississippi Forestry Association, 2020). The mean hourly wage for the farming, fishing and forestry occupational group in Mississippi in 2019 was \$17.41, compared to the United States average of \$22.00 for this same group (US Bureau of Labor Statistics, 2019). Forestry related industries are a leading economic driver in many rural counties in Mississippi, providing employment opportunities for loggers, foresters, consultants, truck drivers and mill workers. Enviva Amory provides opportunities for local residents to gain employment and currently employs approximately 25 people. Further, employees at the Enviva Amory plant, on average, earn wages that are 12% higher than other comparable jobs in the area. The same study found that Enviva Amory’s total direct and indirect economic contribution to the region is over \$36 million dollars (Chmura Economics & Analytics, 2016).

Species/Forest composition

Species of Origin	
Common and Scientific Names	
Softwood	
Loblolly pine (<i>Pinus taeda</i>)	
Longleaf pine (<i>Pinus palustris</i>)	
Pond Pine (<i>Pinus serotina</i>)	
Slash Pine (<i>Pinus elliottii</i>)	
Sand Pine (<i>Pinus clausa</i>)	
Hardwood	
Black Cherry (<i>Prunus serotina</i>)	Red Bay (<i>Persea borbonia</i>)
Black Gum (<i>Nyssa sylvatica</i>)	Red Maple (<i>Acer rubrum</i>)
Blackjack Oak (<i>Quercus marilandica</i>)	River Birch (<i>Betula nigra</i>)
Black Oak (<i>Quercus velutina</i>)	River Oak (<i>Casuarina cunninghamiana</i>)
Black Walnut (<i>Juglans nigra</i>)	Shumard Oak (<i>Quercus shumardii</i>)
Cherry Bark Oak (<i>Quercus pagoda</i>)	Southern Magnolia (<i>Magnolia grandiflora</i>)
Chinkapin Oak (<i>Quercus muehlenbergii</i>)	Southern Red Oak (<i>Quercus flacata</i>)
Hackberry (<i>Celtis occidentalis</i>)	Sugar Maple (<i>Acer saccharum</i>)
Hickory (<i>Carya</i> spp.)	Swamp Bay (<i>Persea palustris</i>)
Holly (<i>Ilex opaca</i>)	Swamp Chestnut Oal (<i>Quercus michauxii</i>)
Laurel Oak (<i>Quercus laurifolia</i>)	Sweet Bay (<i>Magnolia virginia</i>)
Live Oak (<i>Quercus virginiana</i>)	Sweet Gum (<i>Liquidambar styraciflua</i>)
Northern Red Oak (<i>Quercus rubra</i>)	Sycamore (<i>Plantanus occidentalis</i>)
Overcup Oak (<i>Quercus lyrata</i>)	Water Oak (<i>Quercus nigra</i>)
Pecan (<i>Carya illinoensis</i>)	Water Tupelo (<i>Nyssa aquatic</i>)
Persimmon (<i>Diospyros virginiana</i>)	White Oak (<i>Quercus alba</i>)
Pond Cypress (<i>Taxodium ascendens</i>)	Willow Oak (<i>Quercus phellos</i>)
Post Oak (<i>Quercus stellata</i>)	Yellow Poplar (<i>Liriodendron tulipifera</i>)

More information on the composition of the forests of the US Southeast and socioeconomic trends is available from the USDA Forest Service:

1. Ecosystem Provinces: https://www.fs.fed.us/land/ecosysmgmt/colorimagemap/ecoreg1_provinces.html
2. Silvics of North America: https://www.srs.fs.usda.gov/pubs/misc/ag_654/table_of_contents.htm; and
3. Fire Effects Information System: <https://www.fs.usda.gov/rmrs/tools/fire-effects-information-system-feis> and https://www.fs.fed.us/database/feis/pdfs/Little/aa_SupportingFiles/LittleMaps.html.
4. U.S. Forest Resource Facts and Historical Trends: https://www.fia.fs.fed.us/library/brochures/docs/2012/ForestFacts_1952-2012_English.pdf

Link to BP’s Supply Base Report

Refer to BP’s webpage: <https://www.envivabiomass.com/> and on the SBP certificate database entry: <https://sbp-cert.org/certificate-holders/enviva-pellets-Amory-llc-sbp-04-43/>

5.3 Detailed description of Supply Base

A quantitative description of the Supply Base can be found in the organisation’s Supply Base Report (SBR) file located on its entry page of the SBP Certificate Database. The following are summary statistics from the SBR:

- a. Total Supply Base area (ha): 21,300,435 ha
- b. Tenure by type (ha):

State	Federal	State & Local	Private	Total
AL	349,233	172,204	7,503,029	8,024,465
AR	111,973	124,289	1,372,941	1,609,202
GA	35,654	38,557	639,434	713,645
KY	54,806	13,221	374,576	442,604
LA	41,552	33,412	297,118	372,082
MO	147,756	50,928	416,487	615,171
MS	553,163	116,601	6,055,628	6,725,393
TN	104,877	161,102	2,531,894	2,797,873
Total	1,399,014	710,314	19,191,108	21,300,435

c. *Forest by type (ha): All of the supply base area is temperate forest*

Forest Cover Type	AL	AR	GA	KY	LA	MO	MS	TN	Total
White/red/jack pine	6,740	0	0	0	0	0	0	3,029	9,769
Longleaf/slash pine	202,034	0	2,770	0	0	0	151,889	0	356,693
Loblolly/shortleaf pine	3,388,519	316,443	264,270	12,228	44,031	25,893	2,872,150	252,672	7,176,206
Other softwood	27,490	14,601	2,694	628	0	5,281	21,817	53,520	126,031
Pinyon/juniper	0	1,305	0	0	0	0	0	0	1,305
Oak/pine	958,144	79,663	85,700	9,188	11,678	37,476	639,307	174,263	1,995,419
Oak/hickory	2,468,250	499,160	323,562	314,682	45,647	458,187	1,630,420	1,839,041	7,578,949
Oak/gum/cypress	678,903	430,852	13,062	16,787	139,161	23,964	835,274	142,639	2,280,643
Elm/ash/cottonwood	236,946	243,539	16,419	68,711	122,138	47,814	434,678	274,976	1,445,222
Maple/beech/birch	0	0	0	13,829	0	11,408	0	37,688	62,925
Other hardwoods	2,747	3,246	554	0	732	2,139	6,938	7,926	24,282
Exotic hardwoods	17,360	97	0	1,156	0	0	21,337	7,260	47,210
Nonstocked	37,336	20,295	4,614	5,396	8,692	3,008	111,586	4,863	195,790
Total	8,024,469	1,609,201	713,645	442,603	372,080	615,170	6,725,396	2,797,877	21,300,442

d. *Forest by management type (ha): 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):*

State	FSC	SFI	ATFS	Total
AL	252,619	1,207,278	1,005,046	2,464,943
AR	657,471	1,304,836	229,368	2,191,675
GA	37,488	920,918	714,150	1,672,556
KY	39,955	14,227	94,601	148,783
LA	257,615	1,350,176	388,951	1,996,742
MO	40	266,502	41,096	307,638
MS	110,735	841,464	528,156	1,480,355
TN	126,314	157,406	127,327	411,047
Total	1,482,237	6,062,807	3,128,695	10,673,739

5.4 Chain of Custody system

As applicable, all material is subject to the organization’s COC procedures for sourcing certified and non-certified material. The organization sources material from certified sources under its valid COC certificate(s) per the following systems: FSC PEFC and/or SFI.

As applicable, any non-certified sources have been evaluated under the BP’s COC Due Diligence System (DDS) or Controlled Wood procedures, as well as an SBE and/or duly approved Regional Risk Assessment.

6 Evaluation process

6.1 Timing of evaluation activities

Auditor name:	Kyle Meister	Auditor role:	Lead auditor
Auditor name:	Shannon Wilks	Auditor role:	Technical expert

Supplier audits	Primary supplier FMUs visited: 1 Secondary/Tertiary supplier interviews: 2 secondary and 4 tertiary
<i>Supplier sampling is determined using SBP sampling formulas described or cited in SBP Standard 3. Audit teams ensure to sample across the variety of forest ecosystems and/or feedstocks from which the organization sources, including by selecting different land ownership/management (e.g., small, public, private, etc.), harvesting types (thinning, final harvest), and feedstock type (primary, secondary, tertiary, hardwood, softwood, etc.).</i>	

A. Number of days spent on-site for evaluation:	2.0
B. Number of auditors participating in on-site evaluation:	1
C. Number of days spent by any technical experts (in addition to amount in line A):	0.5
D. Additional days spent on preparation, stakeholder consultation, and follow-up:	0.5
E. Total number of person days used in evaluation (A * B + C + D):	3.0

Site Name or Location:	205 Martin Luther King Jr. Blvd, Amory, Mississippi, 38821, United States	
Date and Time of Audit:	3 August 2020 (11 am EST): opening meeting, review of audit scopes, initial document/interview requests, selection of ICT (Bluejeans; Microsoft Teams; and Sharepoint), and scheduling of remote inspections for sites listed below. 8 September 2020: review of audit scopes, any remaining interview/document reviews, and closing meeting	
Audit Activity	Items to Review / Actions	Approx. Time
Opening meeting	Introductions, auditor review of audit scope, audit plan and intro/update to SBP, FSC, and SCS standards and protocols, client description of organization	90 min.
Review of previous nonconformities	Review of evidence of corrective actions taken by organization since previous audit (records, documents, pictures, etc.)	
Review of CoC/SBP procedures, products and material accounting	Written procedures, work instructions, feedstock description (see ID 5B section 4), product group list, accounting system (transfer, percentage or credit; physical separation, percentage method)	1 work day
Review of material balances and records	Auditor-selected sample of the following: material tracking system, summary of purchases and sales, invoices, shipping documents, training records, outsourcing agreements, other applicable SBP/CoC systems, procedures and records, tracebacks from certified outputs to eligible inputs	
Verification of calculations	Auditor-selected sample and verification of calculations for conversion factors, percentage claims, and credit accounts, as applicable	
SBP ST 5, ID5E	Review of GHG data collection, including SAR, DTS, GHG data collection and interviews with relevant staff	
Evaluation of trademarks	Review of auditor-selected sample of SBP and/or SCS on-product and/or promotional trademark uses; review of any on-site trademark uses such as banners, posters, entryway signs	
Secondary/Tertiary Supplier Interviews (Conducted via Phone)	2 secondary and 4 tertiary	Approx. 15

		minutes per call (90 min)
Remote inspection of facility	Review of physical inputs and outputs, material receipt, processing, storage, credit account (if applicable), sale, and overall control	30-60 min.
Staff interviews	Interviews with appropriate number and diversity of staff to assess knowledge of CoC procedures related to their position	Done remotely and/or as part of remote facility inspection
Preliminary closing meeting preparation	Auditor takes time to consolidate notes and review audit findings for presentation at closing meeting	30-60 min.
Preliminary closing meeting and review of findings	Convene with all relevant staff to summarize audit findings, review identified nonconformities, and discuss next steps	
8 September 2020		
Postponed On-Site Audit Requirements Primary Site Visits	SBP STD1-Primary harvest sites-(Amory: 1 supplier)	0.5 work days
Staff interviews	Interviews with appropriate number and diversity of staff to assess knowledge of procedures related to their position	
Closing meeting and review of findings	Convene with all relevant staff to summarize audit findings, review identified nonconformities, and discuss next steps	
End		

6.2 Description of evaluation activities

Refer to the audit itinerary above. For all SBP evaluations, SCS collects evidence using a combination of direct observation, document and record review, and interviews with stakeholders and the organization's personnel & service providers. As reviewing all operations would be cost-prohibitive, SCS implements sampling techniques to ensure that all CCPs are assessed during evaluations. When relevant, other areas and locations are sampled during sequential audits to ensure that different aspects of the organization's control systems are evaluated.

6.3 Process for consultation with stakeholders

SCS relies on its Master Stakeholder List, which contains stakeholders/rightsholders that are identified by type, e.g. ENGO, Government/regulatory, Educational/Academic, Industry, Indigenous/Aboriginal/Tribal, etc.) This list is categorized by country and state/province at the very least, and for this consultation was filtered to omit any stakeholders/rightsholders that were not geographically relevant to the certificate holder/applicant's supply base. A notification is sent out to all identified stakeholders/rightsholders after the BP's consultation period has ended. Comments that are received outside of regular consultation periods are fully considered. Methods used to interview stakeholders/rightsholders may include, for example, telephone calls, in-person meetings, and email exchanges.

No consultation has been conducted by the Biomass Producer or SCS Global Services during this surveillance audit.

7 Results

7.1 Main strengths and weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none"> GHG data collection and calculation systems are consistently implemented. The Track & Trace system ensures a high level of transparency in the supply chain, including via the BP's own evaluation of supplier FMUs. 	Refer to section 10.

7.2 Rigour of Supply Base Evaluation

NA, no Supply Base Evaluation conducted.

Is the current definition of scope adequate for the specific characteristics of the Supply Base and management systems in place?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the means of verification and evidence provided enough to support the risk conclusion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are mitigation measures implemented for specified risk sufficient and adequate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA, no mitigation measures necessary
Are the personnel involved in the development of the Supply Base Evaluation (SBE) knowledgeable in the required fields?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>Refer to Section 10 for any deficiencies noted in the SBE.</i>	

7.3 Collection and Communication of Data

Enviva Pellets Amory has a comprehensive database where all Greenhouse Gas data is compiled and maintained. All compilation is conducted by personnel at Enviva corporate in Bethesda, MD. Records and data are maintained separately for each facility under the Enviva umbrella. For Enviva Pellets Amory, energy use is invoiced by the month and requires adjustment to match the reporting period for electricity. Other energy use, diesel, does not require adjustments.

7.4 Competency of involved personnel

The SBE was completed by Enviva's in-house fiber procurement group who has local forestry experience and knowledge of ecological and social values associated with the supply base, applicable laws and regulations, business management practices, operation of suppliers, and the local forest resource.

Enviva's management and control systems for SBP are the same as those used to meet the SFI/PEFC CoC, which have been in place since 2012. Key personnel tasked with implementing and maintaining the management and control systems relating to SBP compliance are well trained and competent. Enviva assigned

management with appropriate skills and competency to implement and execute the management and control systems relating to SBP compliance. Management interviewed during the assessment were found to be knowledgeable of the SBP requirements.

7.5 Stakeholder feedback

- No stakeholder comments were received before, during or after the evaluation.
- The following comments were received as described in the table below:

Stakeholder Comment	SCS Response

7.6 Preconditions

- No preconditions were issued.
- Preconditions were issued, all of which the organization closed as described in the Major NCRs noted in Section 10.

8 Review of Company's Risk Assessments

Describe how the Certification Body assessed risk for the Indicators. Summarise the CB's final risk ratings in Table 1, together with the Company's final risk ratings. Default for each indicator is 'Low', click on the rating to change. Note: this summary should show the risk ratings before AND after the SVP has been performed and after any mitigation measures have been implemented.

Review of Initial Assessment of Risk designated all core indicators as low, except 2.1.1, 2.1.2, 2.2.3, 2.2.4 and 2.4.1. Risk ratings were determined by reviewing the SBE, SBR and other supporting evidence such as Feedstock Compliance Implementation Manual, Controlled Wood Controlled Source Risk Assessment, Chain of Custody Procedures, supplier agreements and verification through field visits and interviews. No SVP is required.

Table 1. Final risk ratings of Indicators as determined BEFORE the SVP and any mitigation measures.

Indicator	Risk rating (Low or Specified)	
	Producer	CB
1.1.1	Low	Low
1.1.2	Low	Low
1.1.3	Low	Low
1.2.1	Low	Low
1.3.1	Low	Low
1.4.1	Low	Low
1.5.1	Low	Low
1.6.1	Low	Low
2.1.1	Specified	Specified
2.1.2	Specified	Specified
2.1.3	Low	Low
2.2.1	Low	Low
2.2.2	Low	Low
2.2.3	Specified	Specified
2.2.4	Specified	Specified
2.2.5	Low	Low
2.2.6	Low	Low
2.2.7	Low	Low
2.2.8	Low	Low
2.2.9	Low	Low
2.3.1	Low	Low
2.3.2	Low	Low

Indicator	Risk rating (Low or Specified)	
	Producer	CB
2.3.3	Low	Low
2.4.1	Specified	Specified
2.4.2	Low	Low
2.4.3	Low	Low
2.5.1	Low	Low
2.5.2	Low	Low
2.6.1	Low	Low
2.7.1	Low	Low
2.7.2	Low	Low
2.7.3	Low	Low
2.7.4	Low	Low
2.7.5	Low	Low
2.8.1	Low	Low
2.9.1	Low	Low
2.9.2	Low	Low
2.10.1	Low	Low

Table 2. Final risk ratings of Indicators as determined AFTER the SVP and any mitigation measures.

Indicator	Risk rating (Low or Specified)	
	Producer	CB
1.1.1	Low	Low
1.1.2	Low	Low
1.1.3	Low	Low
1.2.1	Low	Low
1.3.1	Low	Low
1.4.1	Low	Low
1.5.1	Low	Low
1.6.1	Low	Low
2.1.1	Low	Low
2.1.2	Low	Low
2.1.3	Low	Low
2.2.1	Low	Low
2.2.2	Low	Low
2.2.3	Low	Low
2.2.4	Low	Low
2.2.5	Low	Low
2.2.6	Low	Low
2.2.7	Low	Low
2.2.8	Low	Low
2.2.9	Low	Low
2.3.1	Low	Low
2.3.2	Low	Low

Indicator	Risk rating (Low or Specified)	
	Producer	CB
2.3.3	Low	Low
2.4.1	Low	Low
2.4.2	Low	Low
2.4.3	Low	Low
2.5.1	Low	Low
2.5.2	Low	Low
2.6.1	Low	Low
2.7.1	Low	Low
2.7.2	Low	Low
2.7.3	Low	Low
2.7.4	Low	Low
2.7.5	Low	Low
2.8.1	Low	Low
2.9.1	Low	Low
2.9.2	Low	Low
2.10.1	Low	Low

9 Review of Company’s mitigation measures

- NA, no mitigation measures.
 The organization implements the following mitigation measures

Indicator	Risk Assessment	Management system
2.1.1 The BP has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation value in the Supply Base are identified and mapped.	The US does not have an SBP approved regional risk assessment that fully considers all of the indicators.	Enviva is using the FSC US CWNRA as the baseline for determining potential areas of high conservation value. Additional work with interested and engaged stakeholders (see Section 6) has been incorporated into the supply base evaluation to supplement Enviva’s ability to accurately map areas of high conservation value
2.1.2 The BP 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.	Related to 2.1.1 If areas of high conservation value cannot be adequately identified the management systems or mitigation measures cannot be implemented to reduce risk.	Related to 2.1.1 Enviva’s use of the FSC US CWNRA and stakeholder engagement has adequately identified areas of high conservation value. Enviva has robust management systems that can address these areas of specified risk and manage the outcome to low risk
2.2.3 The BP 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).	Related to 2.1.1 Identification of key ecosystems and habitats is necessary to begin the process of identifying if they are properly conserved or set aside	Related to 2.1.1 Enviva’s use of the FSC US CWNRA and stakeholder engagement has adequately identified areas of key ecosystems and habitats. Additionally, Enviva’s Forest Conservation Fund provides grant monies to successful applicant to help them set aside or conserve forests containing high conservation values, key ecosystems and habitats. Further, Enviva’s ongoing engagement with interested stakeholders has extended our reach into additional areas of conservation (See section 6). Enviva has robust management systems that can address these areas of specified risk and manage the outcome to low risk.

Indicator	Management System	Means of Verification
<p>2.1.1 2.1.2</p>	<p>Use of FSC US CWNRA and stakeholder engagement to develop appropriate maps of high conservation value areas</p> <p>Control system/Procedures 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; • 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>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>Enviva uses its Tract Approval process and District of Origin process to assess feedstock purchases conformance to these indicators</p>	<ul style="list-style-type: none"> • ENV-SFIS-01 SFI Certified Sourcing Implementation Manual • ENV-PEFCCOC-01 PEFC Chain of Custody Procedures • ENV-FSCCOC-01 FSC Chain of Custody Procedures • ENV-COC-03 Controlled Wood/Controlled Sources Risk Assessment • FSC US Controlled Wood National Risk Assessment • Stakeholder engagement • Master Wood Purchase Agreement • State BMP Manuals • Track & Trace® • HCV Tract Approval Process • District of Origin Process
<p>2.2.3 2.2.4 2.4.1</p>	<p>Control system/Procedures 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>	<ol style="list-style-type: none"> a. Preamble citations b. ENV-SFIS-01 Certified Sourcing Implementation Manual c. Track & Trace® Program d. ENV-PEFCCOC-01 PEFC Chain of Custody Procedures e. ENV-FSCCOC-01 FSC Chain of Custody Procedures

	<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; • 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>Enviva uses its Tract Approval process and District of Origin process to assess feedstock purchases conformance to these indicators.</p>	<ul style="list-style-type: none"> f. ENV-COC-02 Controlled Wood/Controlled Sources Procedure g. ENV-COC-03 Controlled Wood/Controlled Sources Risk Assessment h. Master Wood Purchase Agreement i. Track & Trace® j. District of Origin Process k. HCV Tract Approval Process l. State BMP Manuals and BMP monitoring data
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Enviva's District of Origin process requires secondary feedstock suppliers to annually complete update their supply area information. This annual information exchange is used to assess changes in a secondary feedstock suppliers sourcing practices and to determine if the feedstock provided by the supplier is SBP-compliant or SBP-controlled. In 2019 Amory received secondary feedstock from 54+/- suppliers. All secondary suppliers are SBP-compliant based on their responses to Enviva District of Origin Form and known high conservation value areas. Enviva conducted 9 secondary feedstock audit and all were found to be SBP-complaint sources.

Amory purchases feedstock from 14+/- wood industry suppliers. This supplier type is outside of the scope of Amory's supply base evaluation and are considered SBP-controlled sources.

10 Non-conformities and observations

Identify all non-conformities and observations raised/closed during the evaluation (a tabular format below may be used here). Please use as many copies of the table as needed. For each, give details to include at least the following:

- applicable requirement(s)
- grading of the non-conformity (major or minor) or observation with supporting rationale
- timeframe for resolution of the non-conformity
- a statement as to whether the non-conformity is likely to impact upon the integrity of the affected SBP-certified products and the credibility of the SBP trademarks.

2019 Findings

NC number 2019.1	NC Grading: Observation
Standard & Requirement:	Standard 5, ID 5B, 5.1.5
Description of Non-conformance and Related Evidence:	
Propane is used for one lift truck which is used occasionally for the changing of dyes and plates. Propane usage is not included in the SAR.	
Timeline for Conformance:	Other
Evidence Provided by Company to close NC:	<i>Click or tap here to enter description provided by Company to close the NC.</i>
Findings for Evaluation of Evidence:	Invoices have been summarized for purchases of propane. SAR has been updated to include propane as a fossil fuel. CAR Closed in 2019 report.
NC Status:	Closed

2020 Findings

NC number 2020.1	NC Grading: Minor
Standard & Requirement:	ID5E, 6.2.6
Description of Non-conformance and Related Evidence:	
The explanation on estimations for electricity use is included in the SAR summary Excel file, but not in the SAR. Evidence: SAR, section 3.2.1	
Timeline for Conformance:	Other: Before submission of SAR to end-user
Evidence Provided by Company to close NC:	An explanation has been added to the SAR, section 3.2.1.
Findings for Evaluation of Evidence:	The explanation matches what was provided in the SAR summary Excel file.
NC Status:	Closed

11 Certification decision

Based on the auditor's recommendation and the Certification Body's quality review, the following certification decision is taken:

Certification decision:	Certification approved
Certification decision by (name of the person):	Theodore Brauer
Date of decision:	03/Jan/2021
Other comments:	<i>Click or tap here to enter text.</i>