

Supply Base Report: LaSalle BioEnergy, LLC

Second Surveillance Audit

Scope Change Audit

www.sbp-cert.org



Completed in accordance with the Supply Base Report Template Version 1.3

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 22 February 2016

Version 1.2 published 23 June 2016

Version 1.3 published 14 January 2019

© Copyright The Sustainable Biomass Program Limited 2019

Contents

1	Overview	1
2	Description of the Supply Base	2
2.1	General description.....	2
2.2	Actions taken to promote certification amongst feedstock supplier.....	9
2.3	Final harvest sampling programme.....	9
2.4	Flow diagram of feedstock inputs showing feedstock type [optional].....	10
2.5	Quantification of the Supply Base.....	10
3	Requirement for a Supply Base Evaluation	12
4	Supply Base Evaluation	13
4.1	Scope.....	13
4.2	Justification.....	13
4.3	Results of Risk Assessment.....	13
4.4	Results of Supplier Verification Programme.....	14
4.5	Conclusion.....	14
5	Supply Base Evaluation Process	15
6	Stakeholder Consultation	16
6.1	Response to stakeholder comments.....	16
7	Overview of Initial Assessment of Risk	17
8	Supplier Verification Programme	18
8.1	Description of the Supplier Verification Programme.....	18
8.2	Site visits.....	18
8.3	Conclusions from the Supplier Verification Programme.....	18
9	Mitigation Measures	19
9.1	Mitigation measures.....	19
9.2	Monitoring and outcomes.....	20
10	Detailed Findings for Indicators	21
11	Review of Report	22
11.1	Peer review.....	22
11.2	Public or additional reviews.....	22
12	Approval of Report	23

13 Updates..... 24

13.1 Significant changes in the Supply Base..... 24

13.2 Effectiveness of previous mitigation measures..... 24

13.3 New risk ratings and mitigation measures 24

13.4 Actual figures for feedstock over the previous 12 months 25

13.5 Projected figures for feedstock over the next 12 months..... 26

Annex 1: Detailed Findings for Supply Base Evaluation Indicators 30

1 Overview

Producer name: Drax Biomass, Inc. (DBI)

- LaSalle BioEnergy, LLC (LBE)

Producer location: DBI Corporate: 1500 19th St., Suite 501, Monroe, LA 71201
 LBE: 4915 Hwy 125 Urania, LA 71840

Geographic position: DBI: 32.525870, -92.110582 LBE: 32.52587, -92.110592

Primary contact: Kyla Cheynet
 1500 19th St., Suite 501, Monroe, LA 71201
 +1 404 229-8847
 kyla.cheynet@draxbiomass.com

Company website: www.draxbiomass.com

Date report finalised: 10-10-19

Close of last CB audit: 11-09-19

Name of CB: SCS Global Services

Translations from English: No

SBP Standard(s) used: Standard 1-5, version 1, March 2015

Weblink to Standard(s) used: <https://sbp-cert.org/documents/standards-documents/standards>

SBP Endorsed Regional Risk Assessment: N/A

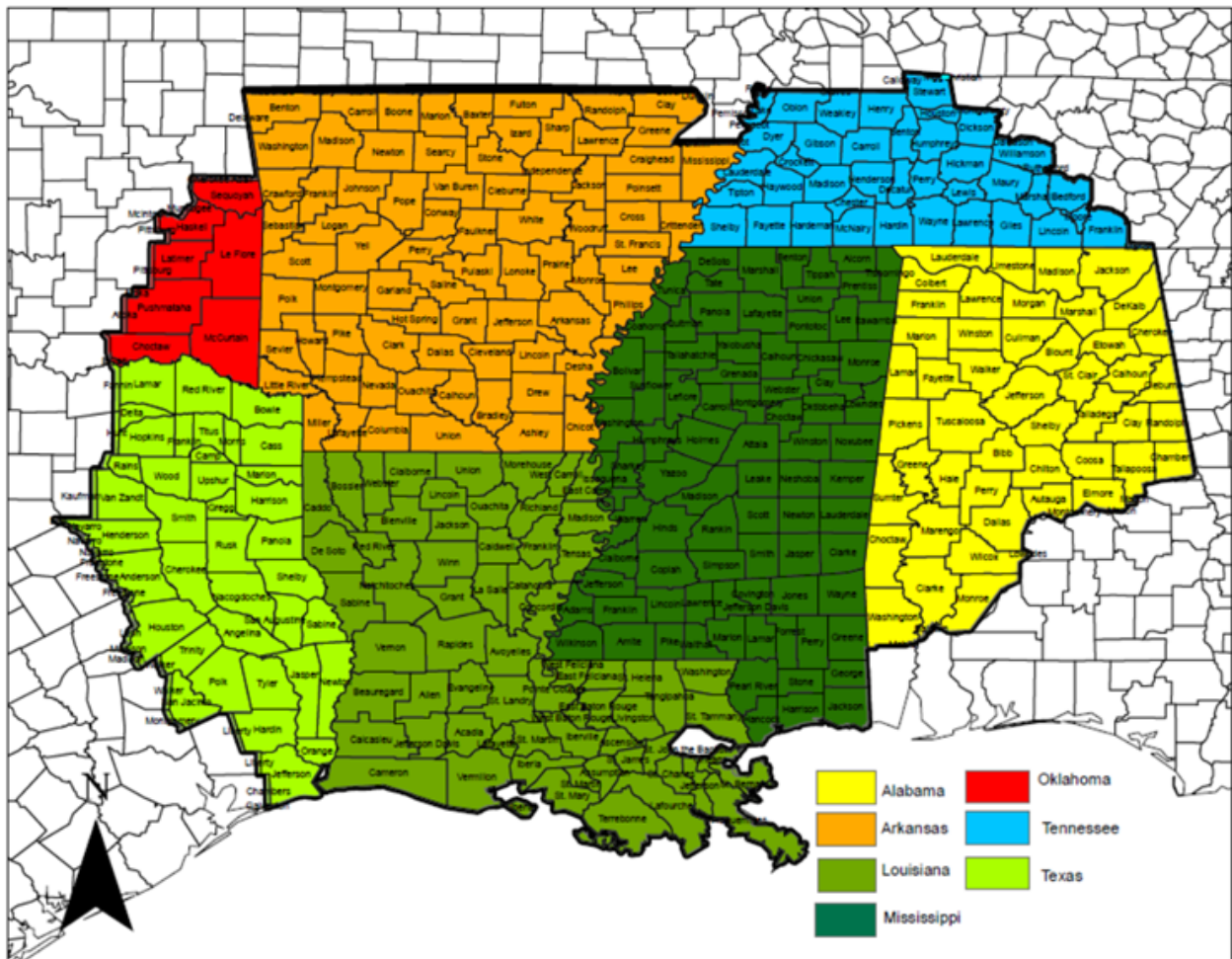
Weblink to SBE on Company website: <http://www.draxbiomass.com/sustainability/#certifications>

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

Drax Biomass Inc’s (“DBI” or “Company”) Gulf Cluster of Biomass Producers fiber procurement catchments Arkansas, Louisiana, Mississippi, and portions of Alabama, Texas, Oklahoma, and Tennessee (see map of supply area below). DBI owns and operates three pellet plants: Amite BioEnergy, LLC (“Amite BioEnergy” or “ABE”) in Gloster, MS; Morehouse BioEnergy, LLC (“Morehouse BioEnergy” or “MBE”) near Beekman, LA; and LaSalle BioEnergy, LLC (“LaSalle BioEnergy” or “LBE”) near Urania, LA. Fiber sourced directly from the forest is generally within a 60 mile radius of the plant. However, residuals produced by wood manufactures are usually procured from 150 miles or less radius. In response to market pressures and/or weather events DBI reserves the ability to source fiber from any of the risk assessed counties shown on map below.



Scale of fiber consumption and resulting harvests vs other forest based industries in DBI's wood procurement catchments

DBI purchases the majority of its fiber indirectly from private landowners with negligible amounts originating from public ownership via a fiber supplier network. About half of the fiber originates from institutionally owned private forests while the other half is derived from family owned private forests. The plan is to increase amount of residual fiber consumption where available.

LaSalle BioEnergy

Facility is designed to consume 800,000 to 1 million green metric tons of biomass material per annum. The sourced material is comprised of mainly southern yellow pine with a potential *de minimis* quantity of mixed southern hardwoods. The pellet and furnace feedstock arrives in the form of low grade roundwood, thinnings, tops, logging and mill residues. According to the USDA Forest Service Timber Products Output Reports, consumption by other forest industry participants within 100 miles of LBE's fiber catchment in 2015 was estimated to be in excess of 14 million metric tonnes per annum which puts into perspective the ability of the catchment to supply the forest products industry. Pulp and chip mills in the region also have an average capacity of around 1 million green short tons per facility per year, with some consuming well over 2 million green tons per year. Sawmills are slightly smaller, consuming on average around 300,000 green short tons per year.

In 2018/19 there have been continuing changes in the number and type of other wood using industries operating in LBE's catchment. Housing starts, although slowing down slightly from last year, are still contributing to sawmilling activity, which results in increased available residual fiber streams. LaSalle Lumber, LLC, a partnership between Tolko Industries, Ltd and Hunt Forest Products, LLC began production at their state of the art sawmill in 2019. LaSalle Lumber is co-located with LaSalle Bioenergy and receives 100% of their residual materials.

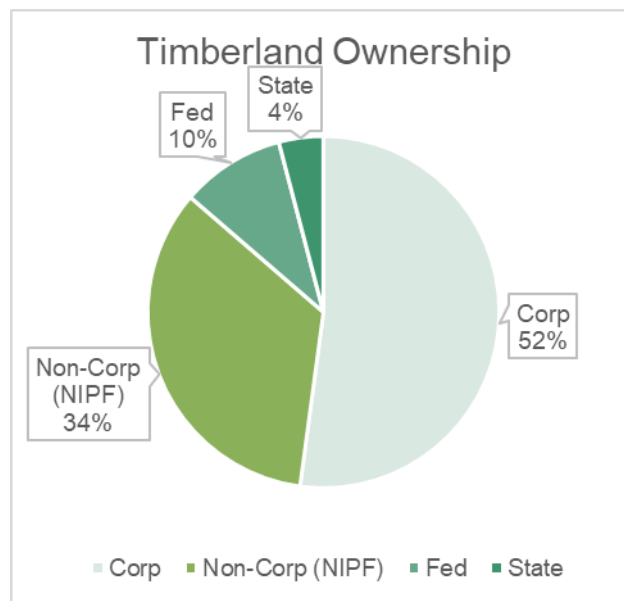
In-woods chipping capacity also remains available in the catchment due to suppressed boiler fuel markets related to low fossil fuel costs. Some suppliers and landowners prefer in-woods chipping operations over conventional harvests because the enable better utilization of forest residuals and brushy hardwood competition which can improve forest vigour, reduce future site preparation costs, and enhance harvest aesthetics.

LBE has also completed the construction of a rail spur to facilitate shipment of pellets to the Port of Baton Rouge by train. This change in mode of transportation has resulted in both monetary and carbon emissions savings over trucking.

Land Use and Ownership patterns

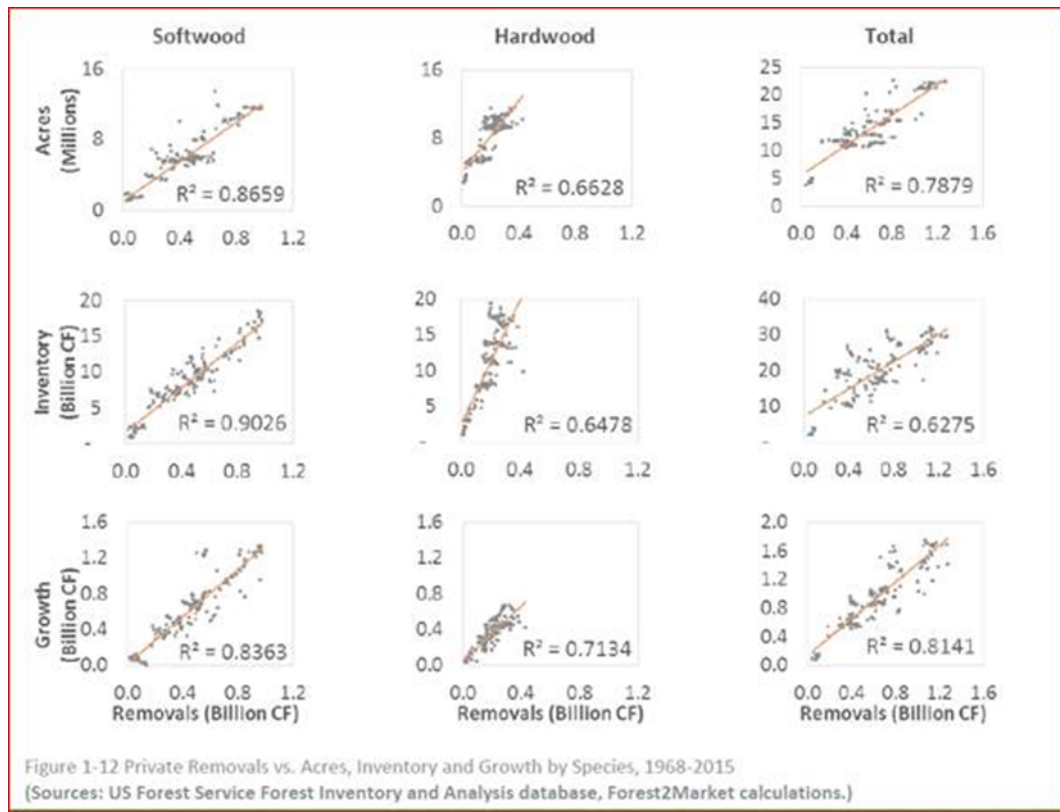
Forestry followed by crop agriculture are the dominant land uses in the LBE catchment. Planted pine forests and other timberlands make up much of the forestland. Some sizeable areas of predominantly unmanaged forest are present along the larger rivers. Most of the forests in these areas have been harvested and regenerated multiple times over the last two centuries. The forests in LBE's catchment are a mosaic of ownerships, acreages and management regimes/intensities.

Over half of the forestlands surrounding LBE are privately owned by corporate forest landowners (i.e. REITs & TIMOs). These forests are often managed more intensively because they must produce shareholder returns. The second largest ownership, comprising slightly over a third of the landbase, is in non-corporate private ownership. These landowners typically manage their timberlands to achieve more diverse objectives. As the average tract size of these holdings is less than 100 acres, timber revenue generally represents just a portion of their total income but is still important to owning and maintaining their properties. The remaining of acreage in LBE’s fiber basket is in public ownership (i.e. federal and state governments), but it is the predictable management regimes of corporate owners, augmented by management on family forest lands, which provide a steady flow of pulpwood for LBE and the surrounding markets.



While forest coverage has stayed steady in these areas during the past 40-50 years, the forests have become increasingly productive in that time. Forest Inventory Analyses (FIA) data shows that growth per acre per year has doubled in the US South since the 1950’s, and it continues to increase as healthy markets provide incentives for owners to invest in forest management. Put simply, landowners’ access to markets helps to ensure that their forests remain as working forests¹.

¹ F2M Report: [Historic Perspective on the Relationship between Demand and Forest Productivity in the US South: At A Glance](#).



Local decline of the US pulp and paper industry has resulted in the closure or curtailment of large pulp mills in or adjacent to the catchment that previously consumed over 3 million tonnes of feedstock collectively each year. The catchment also historically supported several panel mills. The emergence of a wood pellet market has benefited forest owners and contractors in the area by offsetting a portion of the lost demand from the closed mills.

The overall market downturn, subsequent housing market crash of 2008 and the slow recovery in residential construction resulted in reduced levels of demand for sawtimber. This produced an increase in stocks of larger-diameter trees, with a corresponding reduction in felling and replanting. These market dynamics have had long-term consequences for the structure of the forest. One outcome of the changing structure has been the opening of the LaSalle Lumber, LLC sawmill facility, to utilize some of the oversupply of logs.

Looking to the future, further increases in pine forest productivity can be achieved through simple measures such as planting with improved seedlings and implementing diligent forest establishment practices. We will seek to engage with and support this process through the sharing of information and supporting sensible partnerships that promote forest certification through direct landowner contact. In areas with strong markets for forest products, we should expect forests to stay as working forests, whereas other areas may cycle out of forestry into row crops or pastureland, and other agricultural areas may cycle back into forestry. Urban expansion remains the biggest threat to the forest area. Private ownership is expected to remain the main form of forest ownership, but there may be fragmentation as land is split into smaller parcels as it is passed down through generations, thereby creating challenges to implement consistent good forest management practices.

Forestry and Land Management Practices

There is a mature and well-developed forest sector in this geography. Described as a “wood basket to the world”, the US South has grown, harvested and sold many hundreds of millions of cubic meters per year for many decades, while seeing both its forest inventories and productivity levels increase. In the US South and in LBE’s catchment, annual growth exceeds annual drain by a considerable margin. Seventy-six percent of the acres surrounding LBE are heavily forested and defined as timberland. Sixty percent of the timberland base is dedicated to pine production (USDA Forest Service, 2012)².

The main reasons for this include a productive land base that benefits from long growing seasons, sufficient precipitation, and healthy soils, as well as the longstanding engagement of experts and professionals from across industry, academia, and public agencies which help advance sound forest management practices. Species selection is another principal factor, as most landowners grow trees that are indigenous to the area, which creates environmental and economic benefits, such as maintenance of habitats for local flora and fauna, as well as establishing a resilient native growing stock with improved pest and disease resistance. Federal and state governments also provide effective oversight to ensure that forest activities comply with relevant laws and regulations and minimise environmental harm. Moreover, each state employs long-established “Best Management Practices”, with programs to promote logger training and audits that demonstrate high compliance rates. Though the region also possesses a vigorous and productive hardwood sector, LBE primarily uses Southern Yellow Pine (SYP), an abundant and highly productive species. Production and sale of sawlogs remains the main economic driver for landowners, with SYP rotation lengths typically ranging from 20-40 years. The shorter rotations are for the most productive trees on the best sites, while the longer rotations typically apply to trees grown on lower quality sites.

Thinning is an important forest management strategy for growing sawlog-quality SYP. Stands are typically thinned at 12 years old and again at 18 years old to promote faster growth of the remaining trees. Thinning also allows more light, moisture and nutrients to reach the forest floor, which increases the vitality of the forest, improves wildlife habitat, and in turn offers recreational benefits. Forest thinnings make up a considerable proportion of the feedstocks for LBE.

Rotation harvest of SYP is typically conducted through clear cutting. SYP is not tolerant of shade, so the next rotation of young trees requires abundant access to light to grow well. DBI accepts material from rotation harvests, although this is typically limited to residuals and roundwood that are not sold into higher paying markets. The vast majority of material from rotation harvests are completed for and sold into sawlog markets.

The next rotation may be re-established through natural regeneration, or the planting of seedlings, or a combination of both. Reforestation often involves some ground preparation to control competing vegetation.

Presence of CITES or IUCN species

There is no Convention on International Trade in Endangered Species of Wild Flora and Fauna (“CITES”) listed species in the catchment that are threatened or otherwise impacted by forest management activities. There is one International Union for Conservation of Nature (“IUCN”) Red List of Threatened Species that is worthy of note – Longleaf pine (*Pinus palustris*). This species is far less common than it once was, and

² USDA Forest Service Forest Inventory Analysis Program. 2012 data assessed and critiqued by consultancy for procurement region. Accessed Sept 2016. Database accessible at <http://www.fia.fs.fed.us/>.

efforts are underway to promote longleaf pine coverage in the region. The intent of listing species to the Red List is not to promote prohibition of their use but rather to heighten priority setting for conservation of the species (IUCN 2014)³.

Critical to the recovery of the species is continued access to markets for longleaf pine. If landowners do not expect to be able to sell this wood, then they will not plant the tree in the first place. This position is captured in a statement from a USDA researcher and supported by the conservation group the Longleaf Alliance:

“Strong markets for forest products provide incentives for private landowners to keep their lands in forest cover (Wear 2013). This is particularly important across the longleaf range where recent forecasts of human population and income growth point toward increasing pressure in some locations to convert forest land to other uses (Wear 2013)⁴. Strong markets also enable landowners to invest in the management practices required to establish longleaf pine forests and implement practices such as prescribed fire and thinning which are crucial restoration activities⁵.”

Forestland Descriptions

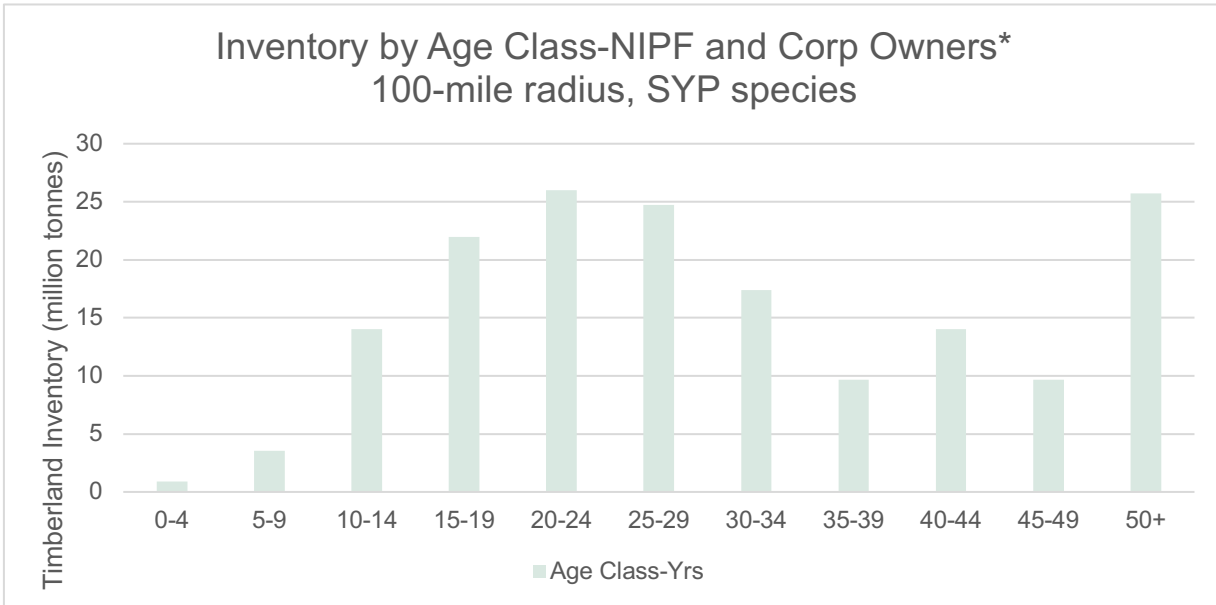
LBE is located near the southern tip of an extensive pine forest situated between the Mississippi River and the Red River’s alluvial plains. These rivers act as a natural geographic barrier for LBE’s supply basin. Despite the presence of two large watersheds in the area, 60% of the acreage within the shed is established as site suitable pine forest and over half of the inventory is pine pulpwood.

State forestry websites feature detailed descriptions of forests and include noteworthy facts about each state’s forests. FIA data is also publicly available, and provide many important parameters, including changes over time, in the states that supply LBE. Summaries of forest coverage near LaSalle (Urania, LA) are shown in the tables below.

³ IUCN Standards and Petitions Subcommittee. 2014. Guidelines for Using the IUCN Red List Categories and Criteria. Version 11. Prepared by the Standards and Petitions Subcommittee. Downloadable from <http://www.iucnredlist.org/documents/RedListGuidelines.pdf>.

⁴ Wear, D. N. 2013. “Forecasts of Land Uses.” Chapter 4 in Southern Forest Futures Project Technical Report. <http://www.srs.fs.usda.gov/futures/reports/draft/Frame.htm>.

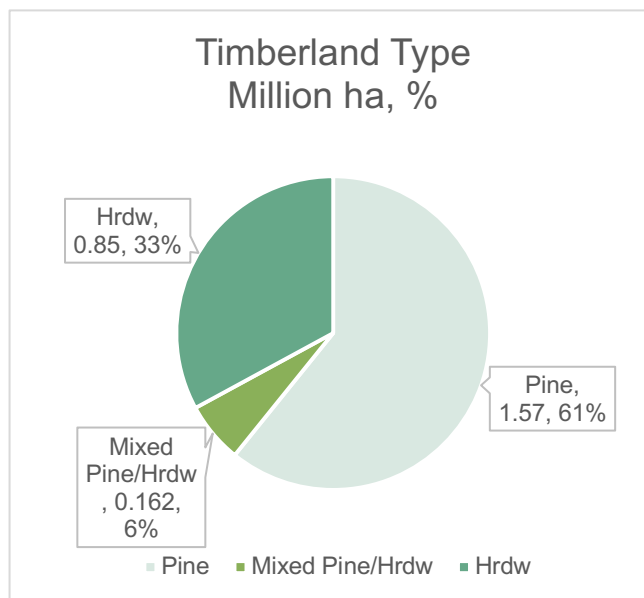
⁵ Longleaf Alliance and NCASI. 2014 “Longleaf Pine: Sustainable Forest Management and the Restoration of a Species” brochure.



*Inventory by Age Class - Non-Industrial Private Forest and Corporate owners

SBP Feedstock Product Groups & Supplier Make-Up⁶

All Primary and Secondary feedstock used by LBE is SBP-compliant. If Tertiary Feedstock is used, it too will be SBP-compliant⁷.



⁶ Commercial sensitivity: Specific numbers omitted. Divulging current or forecasted supplier types and numbers may be used by third parties to gain a competitive advantage in the catchment. These figures are subject to change.

⁷ SBP Compliant Primary, Secondary and Tertiary feedstocks are defined in the "SBP Glossary of Terms and Definition" and described further in "SBP Standard 1, section 6, indicator 1.1.3."

LBE's supplier base is made up of timber dealers, logger-dealers and managers of corporately owned timberland providing primary feedstocks in addition to wood manufacturing suppliers who provide secondary feedstocks. Specific supplier list and volumes by feedstock types is maintained and stringently reviewed by external auditor.

2.2 Actions taken to promote certification amongst feedstock supplier

DBI implemented Sustainable Forest Management programs, many of which require participant companies to promote certified forest management amongst feedstock suppliers. This includes extensive reporting and contractually required training, as well as other components that are necessary for the certifications. DBI's procurement staff are trained to assist suppliers and landowners to achieve these certifications through direct and/or collaborative efforts.

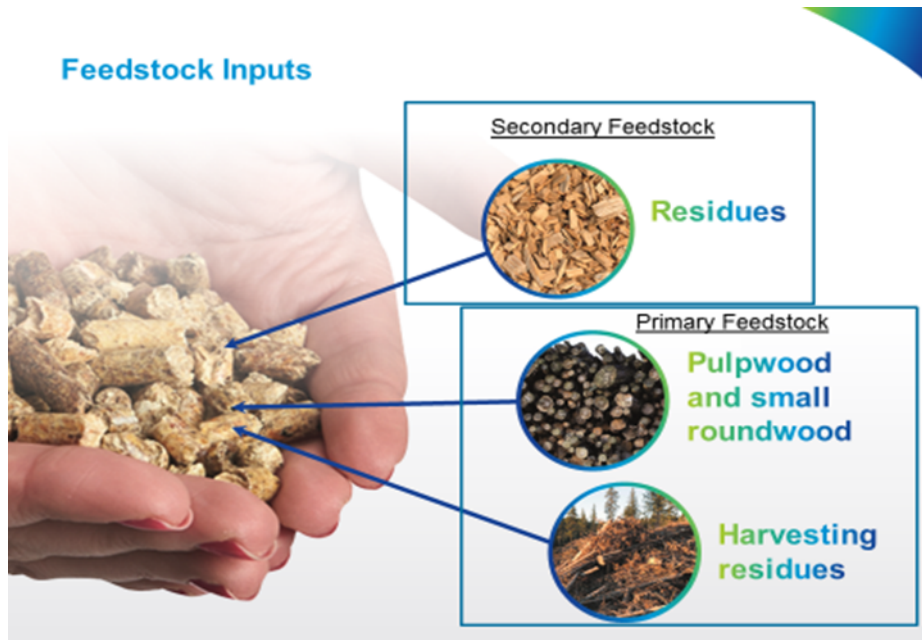
DBI continually monitors as a key performance indicator (KPI) the amount of certified fiber that it purchases and will pursue opportunities to increase the area of certified forests within its catchments.

In 2018 DBI published a document ["The Southern Working Forest – a Guide to Sustainable Management"](#). Chapter 2 of this document outlines the benefits of certification, and contact details are provided for those who want to explore further.

2.3 Final harvest sampling programme

The average rotation length for SYP in LBE's catchment is approximately 35 years or less. This is below the 40 years rotation length stipulated for the final harvest sampling as required by SBP Standard 5 and the proposed Dutch regulations.

2.4 Flow diagram of feedstock inputs showing feedstock type [optional]



2.5 Quantification of the Supply Base

Provide metrics for the Supply Base including the following. Where estimates are provided these shall be justified.

LaSalle BioEnergy Supply Base

- a. Total Supply Base area (hectares): 2.95 million ha cumulative area of all forest types within Supply Base
- b. Tenure by type (ha):

Privately owned	c. 86% (c. 34% small private owners, 52% corporates, investment)
Public	c. 14%
Community concession	<i>de minimis</i>
- c. Forest by type (ha): 2.95 million ha Temperate
- d. Forest by management type (ha):

Plantation	c. 1.05 million ha (c. 70% of softwood areas)
Managed Natural	c. 1.46 million ha (remainder of pine, mixed forests and hardwood areas,)
Natural	unk ha
- e. Certified forest by scheme (ha): *Not known in detail for catchment.* Programme for the Endorsement of Forest Certification™ (PEFC) endorsed forest management schemes: SFI® and American Tree Farm™ are the predominant schemes, with minor areas of Forest Stewardship Council® (FSC®) certified forest. DBI expects the feedstock supply to generally mimic the certified percentage offerings state wide. DBI estimates the ability to procure a conservative 30% of feedstock from certified sources.

Feedstock⁸

Assuming steady state operations for production of 400K to 500K metric tonnes of pellets:

- f. Total volume of Feedstock: 800K to 1.0M green metric tonnes
- g. Volume of primary feedstock: 600K to 800K green metric tonnes
- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes.

Our expectation for SBP-approved certified primary feedstocks in steady state operation would be in ranges shown below

- 40% to 59% certified to an SBP-approved Forest Management Scheme
 - i. FSC®: c. 0% to 19%
 - ii. PEFC-endorsed forest management schemes: c. 80% to 100%
 - 1. SFI®: c. 80% to 100%
 - 2. ATFS™: c. 0% to 19%
- 40% to 59% not certified to an SBP-approved Forest Management Scheme

- i. List all species in primary feedstock, including scientific name
Predominantly Southern Yellow Pine – Majority Loblolly Pine (*Pinus taeda*), smaller quantities of other pines – Slash pine (*Pinus elliotii*), Shortleaf pine (*Pinus echinata*), Spruce pine (*Pinus glabra*), Virginia pine (*Pinus virginiana*) and de minimis volumes of Longleaf Pine (*Pinus palustris*)-see comments in the Presence of CITES or IUCN species section. Minimal component of mixed southern hardwoods, various varieties of oak, maple, hickory, ash and others. Full list of 56 hardwood species available.

Many components of these wide range of species may appear when in-woods chipping occurs. At present, in-woods chips comprise ~15% of LBE's feedstock. However, if this feedstock type is further utilized it could increase to ~20-30%% of LBE's feedstock. The vast majority of the species mix in this feedstock type would be comprised of Southern Yellow Pine with understory and/or timber stand improvement treatments including mixed southern hardwoods making up a minimal amount of the diverse species mix.

- j. Volume of primary feedstock from primary forest - *Nil*
- k. List percentage of primary feedstock from primary forest (i), by the following categories. Subdivide by SBP-approved Forest Management Schemes
 - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme
- l. Volume of secondary feedstock: c 20% to 39% residues
- m. Volume of tertiary feedstock: *None anticipated*

⁸ Commercial sensitivity: Specific volumes omitted. Divulged feedstock volumes may be used by third parties to gain a competitive advantage in the catchment. Our planned numbers, even in ranges, are commercially sensitive. This is because as these new plants ramp up, we have a developing procurement strategy that, if revealed, would disadvantage us in our negotiations. These volumes are subject to change

3 Requirement for a Supply Base Evaluation

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

A Supply Base Evaluation is required because a significant proportion of the forest surrounding the pellet mills is not certified. This evaluation will determine the legality and sustainability of fiber delivered to LBE.

4 Supply Base Evaluation

4.1 Scope

The scope of the evaluation covered the entire supply area for DBI's three pellet plants and considered all existing and potential sources of primary and secondary feedstocks (residuals), as well as the feedstocks' point of origination. The evaluation is consistent with the areas covered by DBI's due diligence processes and risk assessment for PEFC™ Controlled Sources and FSC® Controlled Wood. The intent of the supply base evaluation was to discern the risk level when compared to the indicators of SBP Standard 1. There were no omissions or sub-scopes within the evaluation.

4.2 Justification

The majority of supply comes from private lands, and although there are some larger holdings which are certified, there are many smaller forests that are not. It was therefore deemed prudent to evaluate the entire area without exclusions. The supply area for all pellet mills is included in one assessment, as the applicable legal requirements across the supply base are sufficiently similar, and the forest practices are also sufficiently similar.

This review and analysis was completed by comparing the existence, effectiveness and applicability of statutes/regulations, established forestry best management practices and recognized research from reputable sources to determine compliance and risk rating in relation to Criteria 1 & 2 of the SBP Standard 1.

4.3 Results of Risk Assessment

The Risk Assessment concluded that most aspects are "Low Risk" in the catchment area for the feedstock being used. This is predominantly due to sufficient and effective legal requirements in this geography, supported by a mature forest industry with well-established practices, including Best Management Practices promoted by states, the use of trained, and supported by industry.

This sound framework is supplemented by DBI's procurement procedures and third-party audits for FSC® Chain of Custody (CoC), PEFC™ CoC, and SFI® CoC and Certified Fiber Sourcing. The Fiber Sourcing Standard is held by a large number of operators in our catchment, meaning the vast majority of harvests will fall under the auspices of this procurement standard. In addition, the growth management and harvesting of SYP is less complex than for other forest types, and typically has fewer environmental sensitivities.

For indicators 2.1.2, 2.2.3, 2.2.4 and 2.4.1, there is now a determination of "Specified Risk". This follows analysis of information included in the recently concluded [US FSC® Controlled Wood National Risk Assessment](#). This identified specified risks, detailed in Annex 1. DBI staff attended local FSC® meetings and will continue to attend them to understand and implement mitigations, and to gather views on how effective those mitigations are.

Though FSC® identified "conversion to non-forest" as a potential risk in some areas (which would pertain to indicator 2.1.3), none of the identified counties fall into DBI's catchment.

Mitigation measures are discussed in detail in section 9 below. They sit next to the raft of diligent procurement processes that have been developed, implemented and monitored over the past 4 years.

The timing of the FSC® findings have constrained some of DBI's options prior to the 2019 audit.

4.4 Results of Supplier Verification Programme

Risk assessment did not find any assignment of "unspecified risk" therefore no supplier verification program is required at this time.

4.5 Conclusion

There is "low risk" for most indicators of the SBP Standard 1 based on the evidence provided of sound forestry practices, existing effective legislation and diligent procurement processes that guide industry and landowners on the sustainable management of forests. For the four indicators where "specified risk" has been concluded, mitigating actions derived from multi-stakeholder processes will be implemented and monitored for effectiveness.

Forest inventories are steadily increasing, and carbon stocks remain stable in LBE's catchment. Local communities benefit from the economic impact resulting from LBE's operations.

In conclusion, with diligent procurement processes and implementation of mitigation measures where required, the raw material supply and resulting production of pellets meets the requirements for "SBP-compliant" pellets.

DBI is constantly engaged with stakeholders to ensure any changes are evaluated.

5 Supply Base Evaluation Process

DBI utilized both internal and external resources to complete the Supply Base Evaluation (SBE). The SBE was produced by DBI employees with experience in forest certification and sustainability. A highly qualified consultant with external auditing expertise helped collect and collate initial supporting evidence and stakeholder responses. Other DBI employees, particularly those on the procurement team and those associated with company systems, also contributed to the SBE.

Evidence collected as part of achieving and maintaining pre-existing certification programs was used in the SBE. Remaining shortfalls were completed by using reputable sources of information provided by public agencies, conservation and forestry organizations from within the region.

Contractual requirements with feedstock suppliers provided the baseline by which compliance with SBP indicators is achieved, supported by recognized good governance and the effective rule of law at State and Federal level.

DBI operates a supplier internal audit process in which suppliers are reviewed on a periodic basis depending on a risk level (i.e. certified vs non-certified). The external auditor has a view of the sampling rates and results of those reviews.

6 Stakeholder Consultation

DBI conducted an initial stakeholder consultation which included LBE in 2017 and consulted again in 2018 and 2019 due to expansions in the consolidated supply base.

To properly identify interested stakeholders, DBI staff solicited a wide range of potential stakeholders for the initial consultation. Invitations were sent out to c. 200 stakeholder groups (Appendix A) totalling 240 contacts representing a cross-section of interests and expertise, including local, state and federal agencies, local forest industry participants, research institutions, forestry/landowner associations, NGOs, indigenous peoples and others.

Stakeholders were administered questions via online survey in 2017 and 2018 and were provided the full SBE to review in 2019. The on-line survey presented verifiers for each indicator and consultees were asked to rate the evidence used to conclude each indicator's risk level. Consultees were also solicited to provide additional verifiers and to comment on the quality of the verifiers presented for each indicator. In the initial stakeholder survey DBI received 29 direct responses from 8 participants and subsequently re-visited 13 indicators to assure verifiers were complete.

The certifying body held a follow-up consultation immediately after conclusion of DBI's initial consultation. Results of consultations appear in the certifying body's public audit reports for each biomass producer.

Following close of the consultation, DBI continued a dialogue with an inquiring stakeholder that missed the open comment period. This dialogue did not reveal any previously unknown risks, but local contact emphasised some concerns, particularly in respect of valuable ecosystems in the region. DBI has responded to those concerns and undertakes to continue the dialogue⁹.

6.1 Response to stakeholder comments

Results of previous stakeholder consultations are available in the respective Supply Base Reports posted on the SBP Website <https://sbp-cert.org/certificate-holders/lasalle-bioenergy-llc-sbp-04-23/>. A list of consultees is included in Appendix A. In 2019 stakeholder consultation was conducted on the proposed supply base expansion. This consultation targeted only new stakeholders within the supply base expansion area. Thirty-one stakeholders received a direct email request with the Supply Base Evaluation attached for review. Two Stakeholders responded. One Stakeholder provided detailed comment on the format of the SBE. Suggestions were offered on how to improve clarity, however, no concerns related to mitigations or other processes were presented that would require a material change in program and/or approach.

⁹ Press release highlighting the collaboration with interested stakeholder, Atchafalaya Basinkeeper. <http://draxbiomass.com/news/drax-biomass-collaborates-with-atchafalaya-basinkeeper-to-protect-louisianas-valuable-wetlands/>

7 Overview of Initial Assessment of Risk

The initial risk assessment for DBI determined that most indicators are Low Risk for areas from which LBE procures biomass. The risk ratings were determined by studying a large volume of evidence previously collected to conduct DBI’s company-level Controlled Wood Risk Assessment and Due Diligence Processes, and to determine compliance with the European Union Timber Regulation and the UK Department of Energy and Climate Change’s Timber Standard for Heat and Electricity. The Low Risk ratings were supported by DBI’s conclusion that the United States and the relevant states in its catchment have well-established systems of laws and regulations that satisfy all applicable SBP indicators. There are no sub-scopes.

The four indicators that are “specified risk” are discussed further below.

Table 1. Overview of results from the risk assessment of all Indicators.

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	
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 Supplier Verification Program required due no “unspecified risk” determinations.

8.2 Site visits

N/A

8.3 Conclusions from the Supplier Verification Programme

N/A

9 Mitigation Measures

9.1 Mitigation measures

Specific mitigation measures, beyond diligent procurement processes, were identified for 4 indicators – 2.1.2, 2.2.3, 2.2.4, and 2.4.1. These are all related, and the same mitigations are appropriate to make the risk of non-compliance with the indicators “low”.

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.

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

2.2.4 - The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected

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.

DBI has taken note of work done in producing Guidance for Assessment of Risk, Means of Verification and Mitigation Measures in the SE US, carried in Q3 2018. DBI undertakes risk profiling of suppliers.

Beyond the established due diligence procedures including knowledge of location of primary tracts, access to NatureServe information, prevalence of trained loggers, monitoring, state and federal legislation, contractual requirements, monitoring etc (detailed in Annex 1) the following mitigation measures have been identified for these indicators – the text is per Annex 1, DBI’s supply base evaluation.

FSC US has identified, and developed mitigation measures, for four key ecosystems, Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems, Southern Appalachian Critical Biodiversity Area, and the Central Appalachian Critical Biodiversity Areas.

DBI has integrated the FSC HCV maps into its GIS system and screens all suppliers for their intersection with the Specified Risks identified by FSC. Mitigation for primary feedstock includes controls embedded in DBI’s internal processes which are subject to monitoring and internal audit. DBI does not have line of sight to individual tracts that provide fiber to secondary and tertiary feedstock suppliers, so other mitigations are appropriate. The following provides an overview of mitigations chosen for each FSC Specified risk:

Late Successional Bottomland Hardwoods (LSBH)

As DBI primarily sources Southern Yellow Pine, Late Successional Bottomland Hardwoods are mainly an issue for residual suppliers who use hardwoods and are proximate to LSBH areas. The areas that potentially have LSBH have been mapped by FSC and integrated into DBI’s GIS system and RRA procedures. For residual suppliers, outreach and education will be the choice mitigation tool. For primary suppliers, information is collected on forest type and species is collected for all harvests. If a forest tract is identified as having a high hardwood component the site will be evaluated to determine if it is a LSBH tract. No fiber will be sourced from harvests that endanger the health, vigour, and long-term persistence of these bottomland hardwood tracts. In addition, educational materials will be provided which will attempt to engage landowners, foresters, and loggers in conservation of this forest system.

Native Longleaf Pine Systems (NLPS)

For NLPS, the areas at risk have been identified by FSC at county/parish level. These areas have been included in the GIS system and RRA process. For primary suppliers, information is collected on forest type and species. If longleaf pine is present on the tract DBI will evaluate the tract and determine the regeneration plans for the site. Educational materials will be provided. If conversion of a LSBH is suspected fiber will not be sourced from the tract. Education and outreach will be the primary mitigation for residual suppliers who's sourcing are intersects FSC identified risk areas. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of Native Longleaf Pine systems.

Southern and Central Appalachian Critical Biodiversity Area (CACBA & SACBA respectively)

Both the Central and Southern Appalachian Critical Biodiversity Areas will only affect DBI's sawmill residuals sourcing due to the distance from existing pellet mills. Education and outreach will be the mitigation tool employed. As described for the risks above, these materials will be developed according to best available science and be adapted as new information and approaches come available (i.e. through FSC CW Regional meetings). This educational material will be aimed at increasing awareness of the sensitivities and unique nature of these CBAs in hopes of increasing conservation of these highly biodiverse areas.

Other Relevant Internal Procedures:

DBI utilizes Failure Mode Effects Analysis (FMEA) to develop a risk profile of secondary suppliers. Location of sourcing area in reference to known HCVs, mill sourcing profile (species mixed used), and certification status are a few key criteria that influence risk rank and direct level of engagement and internal audit.

DBI's Sustainability and Procurement team conduct supplier reviews every six months to discuss the results of FMEA analysis and information gained through Residual Supplier Questionnaires (formal guided check-ins performed at a minimum annually). Analysis of the existing matrix of SFI FS certified mills and suppliers is also reviewed. Currently DBI's supply base is over 90% covered by the reach of other SFI certified mills, significantly reducing the risk of sourcing non-compliant material. DBI is active in SFI State Implementation Committees (SICs) and actively shares and acts on information relevant to sustaining a high level of sustainability compliance in the supply basin. DBI also communicates findings and trends gained through SIC participation and internal audit of primary suppliers directly with mills from which residuals are sourced.

If it is determined that the risk of negative impact to the HCV cannot be effectively mitigated through information flow and internal controls DBI can choose not to accept material from a region or a supplier.

DBI's existing programmatic procedures combined with the mitigations described above are sufficient to bring the risk of non-compliance with this requirement to "low".

9.2 Monitoring and outcomes

Monitoring will include continuing attendance at regional FSC® meetings which will inform attendees about the specified risks that have been identified. DBI will also hold periodic meetings with suppliers to assess their performance, including in the implementation and effectiveness of mitigations.

10 Detailed Findings for Indicators

Detailed findings for each Indicator are given in Annex 1.

11 Review of Report

11.1 Peer review

The Supply Base Report was peer-reviewed by an experienced consultant and another pellet producer.

2017 - Via Annual Internal Audit: Mike Ferrucci – Interforest



2017/18 - No external review but completed to include learnings from multi-stakeholder meetings concerning SBR's and the SBP Risk Assessment process.

2018/2019 – Internal review

11.2 Public or additional reviews

Further review was undertaken during the audit process.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:		<i>Sustainability Manager</i>	<i>10/10/19</i>
	Name	Title	Date
<p>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.</p>			
Report approved by:		<i>Senior Director, Procurement</i>	<i>10/23/2019</i>
	Name	Title	Date
Report approved by:	<i>[name]</i>	<i>[title]</i>	<i>[date]</i>
	Name	Title	Date
Report approved by:	<i>[name]</i>	<i>[title]</i>	<i>[date]</i>
	Name	Title	Date

13 Updates

2016/17

Some minor updates have been included in this report. In particular, additions and changes were included in sections 2.1 and 2.5 with updates on progress and reviews of information in sections 4.5 and 6.

Section 2.1: Statements included to address expected changes in feedstock type availability and wood manufacturing ownership in LBE's catchment.

Section 2.5: Updated feedstock proportions to reflect capabilities of what catchment has to offer and changes to LBE's feedstock type intake capabilities.

Section 4.5: Noted that no significant changes have occurred in the catchment to challenge the previous conclusion.

Section 6: Relations with stakeholders continue to evolve and challenges and successes will be noted as they are identified.

Section 11: Noted review of SBR by internal auditor.

Section 13: Section updated with required information to comply with the passing of an additional audit year.

2017/18

Updates to capture emergence of "specified risk" for 4 indicators.

2018/2019

Updates to reflect changes in catchment area and expanded enterprise-wide supply area.

13.1 Significant changes in the Supply Base

The most significant change in the LaSalle Supply area is the start-up of co-located LaSalle Lumber. LaSalle Lumber will supply LBE with 100% of the residuals produced on site. LaSalle Lumber is a program participant of SFI Fiber Sourcing. The consolidated enterprise-wide supply base was expanded to base to accommodate the flow of residuals to DBI plants based on identified efficiencies.

13.2 Effectiveness of previous mitigation measures

Diligent procurement practices and mitigation measures and have been effective.

13.3 New risk ratings and mitigation measures

New risk ratings "specified risk" for 2.1.2, 2.2.3, 2.2.4 and 2.4.1. Mitigation measures identified in section 9 above.

13.4 Actual figures for feedstock over the previous 12 months

Assuming steady state operations for production and the facility's current as built design parameters, including any recent modifications to raw material intake capabilities, the biomass producer will manufacture 400K to 600K metric tonnes of pellets per annum with feedstocks in the following ranges:

- a. Total volume of Feedstock: 800,000 – 1,000,000 tonnes
- b. Volume of primary feedstock: 600,000 – 800,000 tonnes
- c. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes.
 - 40% to 59% certified to an SBP-approved Forest Management Scheme broken down as:
 - i. *FSC*[®]: c. 0% to 19%
 - ii. *PEFC*-endorsed forest management schemes: c. 100%
 1. *SFI*[®]: c. 60% to 79%
 2. *ATFS*[™]: c. 0% to 19%
 - 40% to 59% not certified to an SBP-approved Forest Management Scheme
- d. List all species in primary feedstock, including scientific name
 Predominantly Southern Yellow Pine – Majority Loblolly Pine (*Pinus taeda*), smaller quantities of other pines – Slash pine (*Pinus elliotii*), Shortleaf pine (*Pinus echinata*), Spruce pine (*Pinus glabra*), Virginia pine (*Pinus virginiana*) and de minimis volumes of Longleaf Pine (*Pinus palustris*)-see comments in the Presence of CITES or IUCN species section. Minimal component of mixed southern hardwoods, various varieties of oak, maple, hickory, ash and others. Full list of 56 hardwood species available.

Many components of these wide range of species may appear when primary feedstocks are furnished from in-woods chipping operations or the occasional pine-hardwood mixed pulpwood load is accepted from a traditional harvest. Most of the species mix in this feedstock type would be comprised of Southern Yellow Pine with understory and/or stand improvement treatments including mixed southern hardwoods making up a minute amount of the diverse species mix

- e. Volume of primary feedstock from primary forest – *nil*
- f. 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
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme
- g. Volume of secondary feedstock: 0 – 200,000 tonnes residual feedstock from other forest products industry.
- h. Volume of tertiary feedstock: *nil*

13.5 Projected figures for feedstock over the next 12 months

The LBE operation production is projected to reach a range of 500K to 600K pellet metric tonnes for the 2019/2020 fiscal year¹⁰:

- a. Total volume of Feedstock: > 1.0M green metric tonnes
- b. Volume of primary feedstock: 600,000 – 800,000 tonnes
- c. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes.

Our expectation for SBP-approved certified primary feedstocks in steady state operation would be in ranges shown below

- 40% to 59% certified to an SBP-approved Forest Management Scheme broken down as:
 - i. FSC®: c. 0% to 19%
 - ii. PEFC-endorsed forest management schemes: c. 100%
 - 1. SFI®: c. 60% to 79%
 - 2. ATFS™: c. 0% to 19%
- 40% to 59% not certified to an SBP-approved Forest Management Scheme

- d. List all species in primary feedstock, including scientific name

Predominantly Southern Yellow Pine – Majority Loblolly Pine (*Pinus taeda*), smaller quantities of other pines – Slash pine (*Pinus elliotii*), Shortleaf pine (*Pinus echinata*), Spruce pine (*Pinus glabra*), Virginia pine (*Pinus virginiana*) and de minimis volumes of Longleaf Pine (*Pinus palustris*)-see comments in the Presence of CITES or IUCN species section. Minimal component of mixed southern hardwoods, various varieties of oak, maple, hickory, ash and others. Full list of 56 hardwood species available.

Many components of these wide range of species may appear when primary feedstocks are furnished from in-woods chipping operations or the occasional pine-hardwood mixed pulpwood load is accepted from a traditional harvest. At present, in-woods chips comprise 30% of LBE's feedstock and expected to increase in the next 12-months. Pine-hardwood pulpwood mixed loads are *de minimus*. However, the hardwood component of primary feedstocks is estimated to represent <10% of total pellet feedstocks. Most of the species mix in this feedstock type would be comprised of Southern Yellow Pine with understory and/or stand improvement treatments including mixed southern hardwoods making up a minute amount of the diverse species mix.

- d. Volume of primary feedstock from primary forest - *Nil*

List percentage of primary feedstock from primary forest (i), by the following categories. Subdivide by SBP-approved Forest Management Schemes

- Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme
- Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme

- e. Volume of secondary feedstock: c. 30% to 49% residues

¹⁰ Based off commercial forecasts. Banding used for market confidentiality reasons.

- f. Volume of tertiary feedstock: *None anticipated but could be developed constituting a de minimus volume.*

Appendix A

List of Consultees

Certification Standards				
Sustainable Forestry Initiative®	Forest Stewardship Council®	American Tree Farm System™	International Standards Organization	
Certification Bodies				
Advanced Certification	BM TRADA Cert NA, Inc	Bureau Veritas	Rainforest Alliance	Price Waterhouse Cooper
SCS Global Services	QMI - SAI Global	NSF		
Natural Resources Agencies				
Bayou Cocodrie National Wildlife Refuge	Catahoula National Wildlife Refuge	D'Arbonne National Wildlife Refuge	Grand Cote National Wildlife Refuge	Handy Brake National Wildlife Refuge
Holt Collier National Wildlife Refuge	Lake Ophelia National Wildlife Refuge	Louisiana Wetland Management District	Overflow National Wildlife Refuge	St. Catherine Creek National Wildlife Refuge
Tensas River National Wildlife Refuge	Upper Ouachita National Wildlife Refuge	Yazoo National Wildlife Refuge	USFWS Endangered Species Program	Mississippi Forestry Commission
Louisiana Agriculture & Forestry	Arkansas Forestry Commission	Texas A&M Forest Service	Homochitto National Forest	USFS Southern Research Station
Alabama Forestry Commission	Kisatchie NF	Oklahoma Forestry Service	AL National Heritage Program	OK NRCS
Ouachita National Forest	Natural Resource Conservation Service-Local Offices	Hot Springs National Park	Big Lake Wilderness	Black Fork Wilderness
Buffalo National River Wilderness	Caney Creek Wilderness	Dry Creek Wilderness	East Fork Wilderness	Flatside Wilderness
Hurricane Creek Wilderness	Leatherwood Wilderness	Poteau Mountain Wilderness	Richland Creek Wilderness	Upper Buffalo Wilderness
Cane Creek State Park	Lake Chicot State Park	Moro Bay State Park	AR Natural Heritage Program	Breton Wilderness
Felsenthal Wildlife Refuge	Kisatchie Hills Wilderness	Lacassine Wilderness	Chemin-A-Haut State Park	Lake D'Arbonne State Park
Chemanihaut State Park	Poverty Point World Heritage Site	Lake Claiborne State Park	Jimmie Davis State Park	Winter Quarters State Historic Site

Lake Bruin State Park	LA Natural Heritage Program	Black Creek Wilderness	Gulf Islands Wilderness	Leaf Wilderness
Choctaw NWR	Talladega NF	Sipsey Wilderness	Blandon Springs SP	Cedar Creek SP
Rolan Cooper SP	Boykin WMA	Kinterbush WMA	Demopolis WMA	Little River SF
Clark Creek Nature Area	Percy Quin State Park	Natchez State Park	Lake Lincoln State Park	Mississippi Natural Heritage Program
Kitsatchie Hills Wilderness	Caddo Lake State Park	Martin Creek Lake State Park	Atlanta State Park	Texas Natural Heritage Program
TN Division of Forestry	TN Wildlife Resources Agency			
Professional Organizations				
Southern Group of State Foresters	Louisiana Forestry Association	Mississippi Forestry Association	Arkansas Forestry Association	Texas Forestry Association
Forest Resources Association	The Forest Guild	American Forest & Paper Association	US Industrial Pellet Association	Composite Panel Association
Association of Consulting Foresters-Local Chapters	Society of American Foresters-Local Chapters	The Wildlife Society	Sustainable Forestry Initiative Implementation Committees	State Tree Farm Committees
National Association of Forest Owners	Forest Landowners Association	Four States Timber Association	National Woodland Owners Association-Local Chapters	East Texas and Southeast Texas Timberland Owners Associations
Mississippi County Forestry Associations-Local Chapters	Alabama Forest Landowner Assoc.	Alabama Forestry Assn	SFI SICs and Tree Farm Committees	Oklahoma Forestry Association
Tennessee Forestry Association	Tennessee SIC			
Nongovernmental Organizations				
South Wings	Atchafalaya Basin keeper	Gulf Coast Restoration Network	Sierra Club-Delta Chapter	Dogwood Alliance
Natural Resource Defence Council	The Nature Conservancy-Local Chapters	Bat Conservation International	National Wildlife Federation-Local Chapters	Longleaf Alliance
Ducks Unlimited-Local Chapters	Quail Forever	National Wild Turkey Federation	Quality Deer Management Association	State Wildlife Federations
Indigenous Peoples (Federal and State Recognized)				
Coushatta	Chitimacha	Jena, Tunica-Biloxi	Caddo	Biloxi-Chitamimacha
Choctaw	Clifton-Choctaw	Four Winds	Louisiana Choctaw	Point-Au-Chien
Cherokees of SE AL	Cherokee	Ma-Chris Lower Creek Indiana Tribe	Piqua Shawnee	Star Clan
United Houma	Mississippi Band of Choctaw	Cher-O-Creek Intra Tribal Indiana	Coushatta	Four Winds Tribe
Creeks	Cherokee Tribe of Alabama	MOWA Choctaw Indians		

Local Government				
LaSalle Parish, LA Police Jury	Amite County	Morehouse Parish		
Economic Development Organizations				
Bastrop-Morehouse Chamber of Commerce	Louisiana Economic Development (LED)			
Forest Worker Associations/Programs				
American Logging Council	Arkansas Timber Producers Organization	Texas Logging Council	Mississippi Board of Registration for Foresters	Arkansas Board of Registration for Foresters
Louisiana Logging Council-Regional Chapters	American Wood Council	Alabama Board of Registration for Foresters	Alabama Logging Council	

Annex 1: Detailed Findings for Supply Base Evaluation Indicators

Entirety of Supply Base Evaluation (SBE) applicable to Amite, LaSalle and Morehouse BioEnergy facilities unless notated otherwise.

Preamble

Leading means of verification applicable to most indicators:

The existence of, and effective application of, state and federal legislation is a key verifier. Suppliers and forest landowners located within the defined fiber catchments operate in a social system upheld by the "rule of law". The effectiveness of the rule of law in the US is verified by such indices as the Worldwide Governance Indicators, overseen by the World Bank. The US is in the 90th percentile for rule of law, giving confidence to the rule of law as a control.

Third party certifications are further evidence that Drax Biomass Inc. (DBI) complies with applicable legislation, regulations and/or accepted practices. In addition to the Sustainable Biomass Program (SBP), DBI participates in three other certification programs: FSC® Chain of Custody & Controlled Wood, SFI® Chain of Custody & Fiber Sourcing, and PEFC™ Chain of Custody. DBI's management system, internal processes and policies are reviewed as part of the external third-party audits associated with the certifications listed.

Verifiers are notated as **internal** (in bold) or external verifiers. The Sustainability section of the Drax Biomass webpage contains additional resources.

Landscape Level Risk Assessments:

- FSC® US National Controlled Wood Risk Assessment (US NRA)
- Global Forest Registry (discontinued but valuable for initial evaluation process – reference retained)
- FSC® Controlled Wood Risk Assessments (CWRA) of other forest products users in DBI's fiber procurement catchments
- SBP Supply Base Reports of other forest products users in DBI's fiber procurement catchments
DBI's Due Diligence System (DDS) for fiber procurement

Supporting Company Policies & Procedures:

- Drax Environmental Policy
- Drax Sustainability Policy
- Drax Health & Safety Policy
- **DBI's Biomass Sustainability Programs (BSPs) Contracts, Procedures & Records**

This revision of the Supply Base Evaluation incorporates the final FSC US Controlled Wood Risk Assessment. The US NRA has identified some "specified risks" in relation to high conservation value forests, and to conversion, and has mapped these. There are no areas at risk of conversion to non-forest in DBI's sourcing area, but there are some HCV risks. These have been identified as specified risks in indicators 2.1.2, 2.2.3, 2.2.4 and 2.4.1. DBI will implement suitable mitigation as determined through the FSC multi-stakeholder process, and monitor the effectiveness of that mitigation, also through the FSC process.

SFI Marks are registered marks owned by Sustainable Forestry Initiative.

FSC-C123692

Reproduced with the permission of the PEFC Council.

The use of FSC trademarks does not imply that FSC is responsible for the production of any products, documents or promotional materials.

Indicator	
1.1.1	The Biomass Producer's Supply Base is defined and mapped.
Finding	<p>Drax Biomass Inc's (DBI) fiber procurement catchment includes Arkansas, Louisiana, Mississippi, and portions of Alabama, Texas, Oklahoma, and Tennessee (see map of supply area below). The company owns and operates three pellet plants: Amite BioEnergy (ABE) in Gloster, MS; Morehouse BioEnergy (MBE) near Beekman, LA and LaSalle BioEnergy (LBE) in Urania, LA. Each plant usually draws feedstock within a 70-mile radius but maintains the ability to procure out to a 100-mile radius to procure primary feedstock in response to market pressures and weather events. However, secondary produced by forest product manufactures could be procured from as far away as 200 miles. ABE typically under most circumstances procures fiber from Mississippi, Louisiana and west-central Alabama; LBE from southern Arkansas, Louisiana and potentially from east Texas; and MBE from southern Arkansas, northwest Mississippi, northern Louisiana with the potential for lesser volumes from east Texas/Oklahoma and western Tennessee.</p> <p>A map of DBI's sourcing area forms part of DBI's contract with suppliers.</p>

Means of Verification	<ul style="list-style-type: none"> • Map is provided
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	Indicator
1.1.2	Feedstock can be traced back to the defined Supply Base.
Finding	<p>A map of DBI’s sourcing area forms part of DBI’s contract with suppliers.</p> <ul style="list-style-type: none"> • Binding contractual requirements stipulate that suppliers disclose the source’s origination information (lat/long) to establish a gate pass before loads of roundwood or in-woods chips enter mill sites. • Robust transaction accounting system captures sustainability characteristics about the source upon establishment and assigns relational information to each load registered upon delivery. <ul style="list-style-type: none"> ○ Transaction accounting system captures location, type of cut and species groups and other information. ○ Control points are established and training is completed to ensure only sources of known origin enter mill sites. ○ Monitoring by procurement and sustainability staff verify accuracy of records and locations of tracts. • DBI holds verified SFI[®], PEFC[™] and FSC[®] CoC Certificates substantiating that all feedstock is assessed for risk via a Due Diligence System (DDS). • Majority of feedstock inputs are from primary sources with a growing proportion from secondary sources. Biomass producers with the ability to handle more secondary and tertiary feedstocks (ABE and MBE) are moving towards increasing this perhaps to an approximate 50/50 ratio. • Suppliers of secondary and tertiary feedstocks have contractual requirements to confirm that their feedstock originates within DBI’s defined catchment. This is checked through internal procedures at DBI, including logical haul radius, and regular communication with secondary and tertiary suppliers. Communication includes inspection where required.
Means of Verification	<p>Lead Verifier: Transactional accounting system records – which hold details of volumes, species and locations.</p> <ul style="list-style-type: none"> • Professional fiber procurement & sustainability personnel • Third party audits of sustainability programs serve as evidence that the presence of a functioning supply chain management system that complies with the legal requirements to track and trace raw material. • Administrative processes and fiduciary responsibilities to tax law have been defined and implemented. These require business to identify and capture the district of origin of fiber that enable states to assign and collect severance taxes.

	<p>Additional Citations:</p> <ul style="list-style-type: none"> • Preamble citations including Worldwide Governance Indicators • <u>Forest Property Taxation Systems in the United States</u>: Each jurisdiction has its very own version of record retention &/or payment periods for timber purchases. • For suppliers of secondary and tertiary feedstocks, analysis of their sourcing radius, contractual requirements and regular monitoring provide assurance that feedstock originates within the defined supply base.
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	Indicator
1.1.3	The feedstock input profile is described and categorised by the mix of inputs.
Finding	<ul style="list-style-type: none"> • DBI's Biomass Producers consume biomass feedstock comprised of low value roundwood, thinnings, tops, logging residues and mill residues from the species group southern yellow pine (SYP) with minority components of mixed southern hardwoods. • Binding contractual requirements stipulates that suppliers disclose the source's origination information to establish a gate pass before loads enter mill sites. Compulsory requirements to follow all applicable laws and regulations along with upholding the intent of DBI's commitment to sustainable forestry are included in contracts. • Robust transaction accounting system captures sustainability characteristics about the source upon establishment and assigns relational information to each load registered upon delivery. <ul style="list-style-type: none"> ○ Transaction accounting system captures designation of the inputs and species groups. ○ Control points are established and training is completed to ensure only sources of known origin enter mill sites. • DBI holds verified SFI[®], PEFC[™] and FSC[®] CoC Certificates substantiating that all feedstock is assessed for risk via a Due Diligence System (DDS). • Majority of feedstock inputs are from primary sources with a growing proportion from secondary sources. Biomass producers with the ability to handle more secondary and tertiary feedstocks (especially ABE and MBE) are moving towards increasing this perhaps to an approximate 50/50 ratio. • Monitoring and internal audit is carried out to verify the accuracy and completeness of information gathered. • Suppliers of secondary and tertiary feedstocks have contractual requirements to confirm that their feedstock originates within DBI's defined catchment. This is checked through internal procedures at DBI, including logical haul radius, and regular communication with secondary and tertiary suppliers. Communication includes inspection where required.
Means of Verification	<ul style="list-style-type: none"> • Lead Verifier: Transactional accounting system records of feedstock inputs • Monitoring records

	<ul style="list-style-type: none"> • Administrative responsibilities. Third party audits of sustainability programs serve as evidence that the presence of a functioning supply chain management system that complies with the legal requirements to track and trace raw material. Third party audits provide assurance that accurate material inputs are defined and captured (i.e. species, fiber type, harvest method) while being derived from within the boundaries of the defined risk assessed region. <p>Additional Citations:</p> <ul style="list-style-type: none"> • Preamble citations including Worldwide Governance Indicators • Professional fiber procurement & sustainability personnel
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • FSC US National Risk Assessment has determined there is a “low risk” of illegally harvested wood through examination of 21 indicators including ownership and land use • DBI has written contracts for all its suppliers. • Suppliers are required to abide by all laws and regulations in fiber purchase agreement. • DBI has implemented DDS presenting the laws utilized in the US and each state sourced from to showcase the rule of law and public agency governance. • The World Bank has awarded the U.S. a Global Governance Index rating that is in the 90th percentile for rule of law. • DBI has implemented a procedure to ensure a defined response of preferred actions to handle identified non-compliant material in relation to compliance with the Timber Standard and EUTR • Monitoring, internal and external audit act as checks for completeness and accuracy of records. • Annual review of the DDS is completed to substantiate and reverify the “low risk” determination. • Per the preamble, the Worldwide Governance Indicators provides assurance that the rule of law is effective in this geography. This further assures performance of suppliers of secondary and tertiary feedstocks. • DBI conducted a comprehensive stakeholder consultation to capture feedback about legality issues in the procurement regions. <ul style="list-style-type: none"> ○ One stakeholder voiced their concern about the level of law enforcement and the effectiveness of existing legal controls as they relate to logging. However, DBI continues to support FSC assessment of “low-risk” and through continued monitoring of their catchment finds that the level of enforcement is effective, and that timber trespass is not systemic in procurement region.

Means of Verification	<p>Lead Verifier: Existing Legislation. Risk assessments (listed in preamble) ranging from company to landscape levels have captured the existence and effectiveness of statutory, contractual, property and civil law in the defined supply base.</p> <ul style="list-style-type: none"> Property law is well established and policed through effective courts see WGI rating). Land use challenges are absent and legal processes are present to establish and challenge land ownership in the wood procurement region. Preamble citations including <u>Worldwide Governance Indicators</u> Stakeholder Consultation Certificate of incorporation: Auth # 2211437 & File #: 5068290 <u>verified</u> Transactional accounting system records <u>Forest Action Plans & Wildlife Action Plans, Ex LA</u> <u>National Forest Planning Rule</u>
Evidence Reviewed	<ul style="list-style-type: none"> 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> Information is collected through the transactional system of record regarding, species, volumes, region of origin, and supplier, all required within EUTR. EUTR requires that timber is harvested in accordance with applicable legislation in the country of harvest. Information in 1.2.1 above and bullet points below are indicators of low risk of non-compliance, for all categories of feedstock. The FSC US <u>National Risk Assessment</u> has determined there is a “Low Risk” of “illegally harvested wood”. Each state DBI sources from has timber trespass and theft legislation governing public agencies and enforcement bodies. DBI has due diligence procedures, including checks for illegal activities, that are implemented prior to contract commencing. DBI has implemented a DDS presenting the laws utilized in the US. Each state sourced from has established rule of law and public agency governance. A review of numerous sources provided a “low risk” rating for Illegally Harvested Wood in the entire US. Level of enforcement and effectiveness is evident in news reports and timber trespass is not systemic in procurement catchments. DBI has implemented a procedure to ensure a defined response of preferred actions to handle identified non-compliant material in relation to compliance with the Timber Standard and EUTR. EIA website only cites the United States with regards to U.S. based companies operating in other countries concerning the Lacey Act.

	<ul style="list-style-type: none"> Annual review of FSC CWRA and DDS to substantiate “low risk” or “specified risk” determination. Suppliers are obligated to abide by all laws and regulations by signatory of Fiber Purchase Agreement. Thesis by Timothy Hicks and compendium by Defenders of Wildlife provides a list of forestry laws regarding illegal trespass. This publication provides a listing of all applicable State laws for forestry within each State. State BMP compliance surveys report high levels of compliance. Frequent surveys have found that BMP compliance rates are very high (>90%). Regional controls and evidence also apply to suppliers of secondary and tertiary feedstocks. DBI conducted a comprehensive stakeholder consultation to capture feedback about legality issues in the procurement regions. <ul style="list-style-type: none"> One stakeholder voiced their concern about the level of law enforcement and the effectiveness of existing legal controls as they relate to logging. However, DBI continues to support FSC assessment of “low-risk” and through continued monitoring of their catchment finds that the level of enforcement is effective, and that timber trespass is not systemic in procurement region 								
<p>Means of Verification</p>	<p><u>Lead Verifiers</u></p> <p>Timber trespass and theft legislation, governing public agencies and enforcement bodies are existent and effective. Right to sell material is clearly established as part of legal contract. Management systems, internal processes and company policies reviewed as part of third party certifications.</p>								
	<table border="1"> <thead> <tr> <th>Texas</th> <th>Tennessee</th> <th>Mississippi</th> <th>Louisiana</th> <th>Arkansas</th> <th>Alabama</th> <th>Oklahoma</th> <th>Federal</th> </tr> </thead> </table>	Texas	Tennessee	Mississippi	Louisiana	Arkansas	Alabama	Oklahoma	Federal
	Texas	Tennessee	Mississippi	Louisiana	Arkansas	Alabama	Oklahoma	Federal	
	<table border="1"> <tbody> <tr> <td>State Timber Theft Law</td> <td></td> <td>State Timber Theft Law</td> <td>State Timber Theft Law</td> <td>State Timber Theft Law</td> <td>State Timber Theft Law</td> <td>Forestry Code</td> <td>US: Lacey Act</td> </tr> </tbody> </table>	State Timber Theft Law		State Timber Theft Law	State Timber Theft Law	State Timber Theft Law	State Timber Theft Law	Forestry Code	US: Lacey Act
	State Timber Theft Law		State Timber Theft Law	State Timber Theft Law	State Timber Theft Law	State Timber Theft Law	Forestry Code	US: Lacey Act	
<table border="1"> <tbody> <tr> <td>Publication explaining timber theft law.</td> <td>State v. Lewis Timber Theft Case</td> <td>Annual report presenting enforcement action stats</td> <td>Timber theft cases & litigation disclosure via search engine.</td> <td>Annual reports presenting enforcement action stats.</td> <td>2011 enforcement report</td> <td>No reports returned by web crawler</td> <td>Enforcement Article summary recent cases</td> </tr> </tbody> </table>	Publication explaining timber theft law.	State v. Lewis Timber Theft Case	Annual report presenting enforcement action stats	Timber theft cases & litigation disclosure via search engine.	Annual reports presenting enforcement action stats.	2011 enforcement report	No reports returned by web crawler	Enforcement Article summary recent cases	
Publication explaining timber theft law.	State v. Lewis Timber Theft Case	Annual report presenting enforcement action stats	Timber theft cases & litigation disclosure via search engine.	Annual reports presenting enforcement action stats.	2011 enforcement report	No reports returned by web crawler	Enforcement Article summary recent cases		
<table border="1"> <tbody> <tr> <td>Enforcement action example.</td> <td>Extension Fact Sheet</td> <td>Article presenting enforcement action stats for past two years.</td> <td></td> <td></td> <td>Changes to AL forestry enforcement</td> <td>No reports returned by web crawler</td> <td>Third party effectiveness Environment Investigation</td> </tr> </tbody> </table>	Enforcement action example.	Extension Fact Sheet	Article presenting enforcement action stats for past two years.			Changes to AL forestry enforcement	No reports returned by web crawler	Third party effectiveness Environment Investigation	
Enforcement action example.	Extension Fact Sheet	Article presenting enforcement action stats for past two years.			Changes to AL forestry enforcement	No reports returned by web crawler	Third party effectiveness Environment Investigation		
	<ul style="list-style-type: none"> Preamble citations including Worldwide Governance Indicators Annual review of DDS completed to substantiate “low risk” determination Stakeholder Consultation Transactional system reports Timber theft resources by state, Forest 2 Market “Illegal Logging and Global Wood Markets”, Seneca Creek Assoc & World Resources Institute Assessment of Lawful Harvesting & Sustainability of US Hardwood Exports, American Hardwood Export Council Illegal logging portal A Nationwide Survey of Timber Trespass Legislation. Hicks, Timothy. Master of Forestry Thesis March 2005 PSU School of Forest Resources. State Forestry Laws. Defenders of Wildlife, October 2000. Southern Group of State Foresters 2011 Report on BMP Implementation Review of timber security news feeds 								

Evidence Reviewed	<ul style="list-style-type: none"> 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> Operational Control Procedures for Wood Procurement states "establishment of account includes the payment of severance taxes to the appropriate authority." Load receipts and vendor statements are issued to suppliers for reconciliation with landowners. Each jurisdiction has its very own version of record provisions &/or payment periods for timber purchases. DBI exceeds the most stringent with record retention policies. 						
	Mississippi:	Louisiana	Arkansas	Alabama	Oklahoma	Tennessee	Texas
	<u>Payment window and access to load tickets</u>	<u>Provide load tickets & loader logs</u>	<u>Payment window</u>	<u>Forestry Records Law</u>	<u>Forestry Code</u>	<u>The state of Tennessee does not have a severance or yield tax on timber or timber products.</u>	<u>Payment window and load tickets</u>
Means of Verification	<ul style="list-style-type: none"> No export taxes or duties are required for sale of pellets. Severance taxes are paid on behalf of the supplier by DBI allowing the landowner to produce the filing/return with the proper tax authority. Sec of State Certificate of good standing and no tax liens exists for Amite BioEnergy LLC, Morehouse BioEnergy LLC, LaSalle BioEnergy LLS or Baton Rouge Transit LLC <u>FSC US National Risk Assessment</u> has determined there is a "low risk" of illegally harvested wood through examination of 21 indicators including payment of taxes, royalties and duty (indicators 1.2, 1.4-1.7, 1.17, 1.19). <u>Regional and National controls apply to suppliers of secondary and tertiary feedstocks.</u> 						
	<u>Lead Verifier:</u> Effective application of State and Federal legislation in respect of customs and duties, especially dealing with assessments and collections. Each jurisdiction has its very own version of record retention &/or payment periods for timber purchases. Strong contractual law drives compliance. Management systems, internal processes and company policies reviewed as part of third party certifications. <ul style="list-style-type: none"> Preamble citations including Worldwide Governance Indicators Transaction System Records 						

	<ul style="list-style-type: none"> • DBI's receipts of paid severance tax, tax liens and filing status (<u>State Tax Agencies</u>) • DBI's Certificates of Good Standing (Ex: <u>Louisiana Sec of State</u>, <u>Mississippi Sec of State</u>) • <u>Timber severance tax by state.</u> • <u>Arkansas Tax Depletion and need by AFC</u> • <u>Drax Annual Report</u>
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • DBI does not procure any species that are currently listed in CITES. Reviewed CITES website to determine the US ratified in 1974 and <u>no trade suspensions with the US exists.</u> • Monitoring of primary feedstock tracts and secondary feedstock suppliers and their feedstocks. • Annual review of DDS: DDS for DBI's procurement area was determined to be "low risk" which includes an evaluation consulting that no commercial tree CITES species occur in wood procurement catchments. • FSC US National Controlled Wood Risk Assessment has determined there us "Low Risk" of illegally harvested wood through examination of 21 indicators including compliance with CITES requirements (indicator 1.20) • In the United States, CITES enforcement is a Federal responsibility and is shared between US Customs and Border Protection (Customs), the Animal and Plant Health Inspection Service (APHIS) and the US Fish and Wildlife Service (USFWS). USFWS is the official U.S. CITES management authority. • Fiber Purchase Agreement obligates suppliers to abide by all laws and regulations as a signatory. • DBI does not procure any species that are currently listed in CITES. Reviewed CITES website to determine the US ratified in 1974 and no trade suspensions with the US exists. • Monitoring of primary feedstock tracts and secondary feedstock suppliers and their feedstocks. • Annual review of DDS: DDS for DBI's procurement area was determined to be "low risk" which includes an evaluation consulting that no commercial tree CITES species occur in wood procurement catchments. • FSC US National Risk Assessment has determined there is a "low risk" of illegally harvested wood through examination of 21 indicators including compliance with CITES requirements (indicator 1.20). • In the United States, CITES enforcement is a Federal responsibility and is shared between US Customs and Border Protection (Customs), the Animal and Plant Health Inspection Service (APHIS) and the US Fish and Wildlife Service (USFWS). USFWS is the official U.S. CITES management authority.

	<ul style="list-style-type: none"> Fiber Purchase Agreement obligates suppliers to abide by all laws and regulations as a signatory. Regional and National controls apply to suppliers of secondary and tertiary feedstocks.
Means of Verification	<p><u>Leading Verifier:</u> CITES list is available and reviewed periodically. CITES is administered enforced by public agencies with robust governance. Third party audits of sustainability programs evidences the presence of a functioning supply chain management system that assures accurate material inputs are defined and captured (i.e. species and fiber type).</p> <ul style="list-style-type: none"> Preamble citations including Worldwide Governance Indicators Transactional System Records Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington DC, 1973) The enforcement of <u>CITES in the US by Fish & Wildlife Service</u> <p>Monitoring of primary feedstock tracts, and regular review of</p>
Evidence Reviewed	<ul style="list-style-type: none"> 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
Comment or Mitigation Measure	None

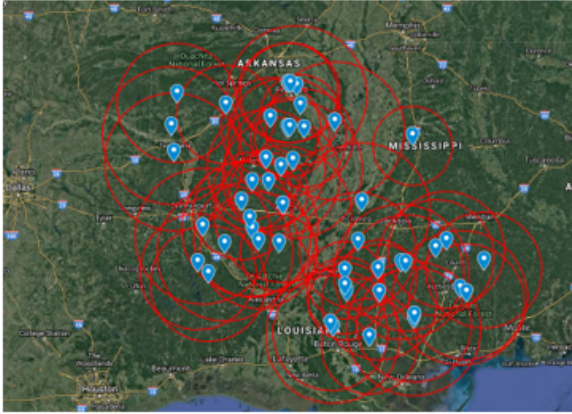
	Indicator
1.6.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that feedstock is not sourced from areas where there are violations of traditional or civil rights.
Finding	<ul style="list-style-type: none"> The recent FSC Controlled Wood National Risk Assessment for the US has determined that there is a “Low Risk” of “wood harvested in violation of traditional and human rights” in the conterminous US (Category 2). Recognized and equitable processes are in place to resolve conflicts of substantial magnitude pertaining to traditional rights. Though not ratified, the United States is in overall compliance with the ILO Convention 169, which addresses customs and beliefs, education and training, health services, land rights, social security, protection of language and culture, and pay and working conditions. The legal system in the United States is generally considered fair and efficient in resolving conflicts pertaining to traditional rights including use rights, cultural interests or traditional cultural identity. There are different mechanisms or processes that allow Native American tribes, as well as any private citizen, to deal with disagreement and conflict related to decisions affecting natural resources, and forests that are considered to be equitable. Note the list of Federal Acts Below Communications with tribes located in procurement region occurred during the formation of the DDS and via the stakeholder consultation. Intra-tribal councils and the Bureau of Indiana Affairs resources provide information concerning consultations, actions and resolutions. Regional and National controls and evidence (e.g. FSC determination of “Low Risk”) apply to suppliers of secondary and tertiary feedstocks. DBI undertakes regular assessment of supplier performance.

Means of Verification	<p><u>Lead Verifier: FSC Controlled Wood National Risk Assessment</u> and the existence and effective application of federal and state legislation and conventions. These aspects provide protection and recourse if breached. Programs available to contribute to improved circumstances for indigenous tribes. Management systems, internal processes and company policies reviewed as part of third party certifications.</p> <ul style="list-style-type: none"> • Preamble citations including Worldwide Governance Indicators • Stakeholder Consultation • <u>American Indian Religious Freedom Act of 1978 (amended 1994)</u> • <u>Indian Child Welfare Act of 1978</u> • <u>Indian Citizenship Act of 1924</u> • <u>Indian Self-Determination and Education Assistance Act of 1975</u> • <u>Native American Languages Act of 1990</u> • <u>Tribal Law and Order Act of 2010</u> • <u>ILO Convention 169</u> • <u>US Dept of Interior-Indiana Affairs</u> • Inter-Tribal Councils of the region • <u>USFS Tribal Relations</u>
Evidence Reviewed	<ul style="list-style-type: none"> • All means of verification reviewed
Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk RA <input type="checkbox"/> Unspecified Risk at RA
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • DBI has access to various maps identifying forests and other areas of high conservation values. These include <ul style="list-style-type: none"> ○ <u>FSC Controlled Wood National Risk Assessment</u> ○ NatureServe maps identifying G1G2 and federally threatened and endangered species ○ Through DBI's due diligence, maps and information from WWF and others have been considered. • DBI has a procedure to utilise the mapping resource and to identify other controls - "Avoiding Biodiverse Areas" • RAMSAR sites: two named sites at far reaches of fiber procurement basins- Catahoula Lake, LA and Caddo Lake, TX. All sites have NGO involvement and protected by state &/or federal laws • DBI has an internal control that it will not source from cypress/tupelo eco-systems. DBI shares information about forests and other areas with high conservation values with suppliers of secondary and tertiary feedstocks
Means of Verification	<p>Lead verifier: NatureServe Data and Rapid Risk Assessment tool</p> <ul style="list-style-type: none"> • <u>Review of maps held by DBI</u> • Check against other external maps such as FSC National Controlled Wood RA • Existence of effective legal frameworks in the region.

Evidence Reviewed	<ul style="list-style-type: none"> 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
Comment or Mitigation Measure	<p>Suitable maps available to verify that forests and other areas of high conservation value have been identified and mapped. Information is shared as necessary.</p> <p>The FSC US National Risk Assessment has identified 3 sensitivities of this nature – Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems and the Dusky Gopher Frog.</p>

	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	<ul style="list-style-type: none"> The FSC US National Risk assessment has identified that there are five “specified risks” within DBI’s sourcing area. They include Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems, and the Dusky Gopher Frog, Southern Appalachian Critical Biodiversity Area, and Central Appalachian Biodiversity Area DBI recognizes that there are additional species and natural community types which FSC did not elevate to the level of “Specified Risks” but which still warrant protection. For these additional sensitivities DBI has determined that adequate internal (procedural) controls and external (regulatory and certification related) controls exist which bring the risk of non-compliance with this requirement to “low”. These include, but are not limited to, the following: <ul style="list-style-type: none"> DBI has access to NatureServe maps and information to identify sensitive areas. For primary feedstocks the location of the tract is known prior to purchase. DBI has Rapid Risk Assessment tool to assist in sourcing primary feedstocks. Strong legislative arrangements such as Endangered Species Act and Clean Water Act are in force and effective. DBI has monitoring and internal audit procedures to assess activity and assess the whether records are complete and correct. There are <u>State Forest Action Plans</u> and <u>State Wildlife Action Plans</u> that supplement activity on private lands There are contractual requirements for suppliers to: <ul style="list-style-type: none"> Follow State BMPs Use trained loggers Meet all legal requirements Part of the supply area has certified lands, usually to SFI or American Tree Farm. These Standards implement controls for hcv sensitivities A further proportion of feedstock originates in Federal or State forests, which have controls for these sensitivities. SFI Fiber Sourcing is prevalent across the region, meaning controls for identification of hcv areas and implementation of controls is necessary for access to many markets. Having identified sensitivities, controls include avoidance, sharing of information, use of trained personnel, monitoring (see below).

	<ul style="list-style-type: none"> ○ The sensitivities and controls are pertinent to suppliers of secondary and tertiary feedstocks as well as primary feedstock. ○ State BMPs designed to meet CWA requirements provide protection for aquatic biodiversity, and frequent surveys have found that BMP compliance rates are very high (>90%). <p>Map depicting coverage of SFI FS mill sourcing areas within DBI supply area:</p> 
<p>Means of Verification</p>	<ul style="list-style-type: none"> ○ Availability of mapping resources ○ Guidance for landowners and secondary/feedstock suppliers ○ Transactional system records ○ Preamble citations including Worldwide Governance Indicators ○ Records of BMP compliance in sourcing area ○ Records of logger training in sourcing area ○ Regular review of level of illegal activity and inconsistent practices through SIC meetings ○ Stakeholder consultation process ○ Regular review of supplier performance
<p>Evidence Reviewed</p>	<ul style="list-style-type: none"> ● All means of verification reviewed
<p>Risk Rating</p>	<p><input type="checkbox"/> Low Risk <input checked="" type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>
<p>Comment or Mitigation Measure</p>	<p>Mitigation for primary feedstock includes controls embedded in DBI’s internal processes which are subject to monitoring and internal audit. DBI has integrated the FSC HCV maps into its GIS system and Rapid Risk Assessment process and actively screens all tracts and can assess sensitivities and apply appropriate controls directly. DBI has controls in place to record the cover type and species of stand from which southern yellow pine is sourced. In this way receipt of longleaf pine and harvesting associated with hardwood systems is monitored to ensure that there is no conversion or degradation of high conservation forests on tracts from which we receive roundwood or in-woods chips. Since starting operations in 2015, we have not received any longleaf feedstock as roundwood or in-woods chips.</p> <p>DBI does not have line of sight to individual tracts that provide fiber to secondary and tertiary feedstock suppliers, so other mitigations are appropriate.</p> <p>FSC US has identified, and developed mitigation measures, for five sensitivities which are relevant to secondary and tertiary suppliers - Late Successional Bottomland Hardwoods (LSBH), Native Longleaf Pine Systems (NLPS), Southern Appalachian Critical Biodiversity Area (SACBA), Central Appalachian Critical Biodiversity Area (CACBA), and the Dusky Gopher Frog (DGF).</p>

Dusky Gopher Frog (DGF)

For the Dusky Gopher Frog, FSC identifies two small areas at the extreme south of our sourcing area. The DGF will only be relevant to a subset of DBI’s residual suppliers. FSC has identified education and outreach as a mitigation option for the DGF. DBI will provide educational materials to the suppliers which have the potential to source from the FSC identified risk areas. Educational materials will be informed by the best available science and adapted as new information and/or approaches become available. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of DGF populations.

Late Successional Bottomland Hardwoods (LSBH)

As DBI primarily sources Southern Yellow Pine, Late Successional Bottomland Hardwoods are mainly an issue for residual suppliers who use hardwoods and are proximate to LSBH areas. The areas that potentially have LSBH have been mapped by FSC and integrated into DBI’s GIS system and RRA procedures. For residual suppliers, outreach and education will be the choice mitigation tool. For primary suppliers, information is collected on forest type and species is collected for all harvests. If a forest tract is identified as having a high hardwood component the site will be evaluated to determine if it is a LSBH tract. No fiber will be sourced from harvests that endanger the health, vigour, and long-term persistence of these bottomland hardwood tracts. In addition, educational materials will be provided which will attempt to engage landowners, foresters, and loggers in conservation of this forest system.

Native Longleaf Pine Systems (NLPS)

For NLPS, the areas at risk have been identified by FSC at county/parish level. These areas have been included in the GIS system and RRA process. For primary suppliers, information is collected on forest type and species. If longleaf pine is present on the tract DBI will evaluate the tract and determine the regeneration plans for the site. Educational materials will be provided. If conversion of a LSBH is suspected fiber will not be sourced from the tract. Education and outreach will be the primary mitigation for residual suppliers who’s sourcing are intersects FSC identified risk areas. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of Native Longleaf Pine systems.

Southern and Central Appalachian Critical Biodiversity Area (CACBA & SACBA respectively)

Both the Central and Southern Appalachian Critical Biodiversity Areas will only affect DBI’s residual sourcing due to the distance from existing pellet mills. Education and outreach will be the mitigation tool employed. As described for the risks above, these materials will be developed according to best available science and be adapted as new information and approaches come available (i.e. through FSC CW Regional meetings). This educational material will be aimed at increasing awareness of the sensitivities and unique nature of these CBAs in hopes of increasing conservation of these highly biodiverse areas.

Other Relevant Internal Procedures:

DBI utilizes Failure Mode Effects Analysis (FMEA) to develop a risk profile of secondary suppliers. Location of sourcing area in reference to known HCVs, mill sourcing profile (species mixed used), and certification status are a few key criteria that influence risk rank and direct level of engagement and internal audit.

DBI’s Sustainability and Procurement team conduct supplier reviews every six months to discuss the results of FMEA analysis and information gained through **Residual Supplier**

	<p>Questionnaires (formal guided check-ins performed at a minimum annually). Analysis of the existing matrix of SFI FS certified mills and suppliers is also reviewed. Currently DBI's supply base is over 90% covered by the reach of other SFI certified mills, significantly reducing the risk of sourcing non-compliant material. DBI is active in SFI State Implementation Committees (SICs) and actively shares and acts on information relevant to sustaining a high level of sustainability compliance in the supply basin. DBI also communicates findings and trends gained through SIC participation and internal audit of primary suppliers directly with mills from which residuals are sourced.</p> <p>If it is determined that the risk of negative impact to the HCV cannot be effectively mitigated through information flow and internal controls DBI can choose not to accept material from a region or a supplier.</p> <p><i>DBI's existing programmatic procedures combined with the mitigations described above are sufficient to bring the risk of non-compliance with this requirement to "low".</i></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	<ul style="list-style-type: none"> • <u>FSC Controlled Wood National Risk Assessment</u> does not identify conversion to non-forest as a risk in DBI's sourcing area. • FIA data indicates relatively stable forested acres in DBI's sourcing area. • DBI avoids taking primary feedstock from sites where there are known plans for conversion to non-forest. • Rarity of SBP defined "production plantation forests" in wood procurement region. • DBI has made a public statement regarding supplies coming from stands that were natural hardwoods in 2008 and are converted to non-forest or production plantation. • DBI spec sheets specify pine pulpwood knowing that minor amounts of hardwoods will arrive on occasion. DBI uses primarily SYP with minority amounts of southern mixed hardwoods of which are all native and naturally occurring species. Internal audits prompt for species review to compare as declared on purchase order. • Historical evidence that healthy markets keep forests as forests. • Regional indices and trends, such as those generated from FIA data and state level forest assessments, are suitable for monitoring risk of conversion in relation to suppliers of secondary and tertiary feedstocks. • Net increase in forested acreage, stable to increasing hardwood inventories and favorable growth to drain ratios substantiate the current low-risk designation.
Means of Verification	<p><u>Lead Verifier:</u> FSC Risk assessment and the rarity of SBP defined "production plantation forests" in wood procurement region. Identify and monitor trends in forest growth and changes in land use via reliable resources and technologies. Identify and monitor results of drivers that persuade landowner behaviour. Management systems, internal processes and company policies governing these aspects reviewed as part of third party certifications.</p> <ul style="list-style-type: none"> • <u>FSC Controlled Wood National Risk Assessment</u> and its findings re conversion. • <u>Forest Inventories & Timber Products Output Reports</u> • <u>State Forest</u> and <u>Wildlife</u> Action Plans • <u>Land Cover National Dataset</u>, evergreen

	<ul style="list-style-type: none"> • Land use change monitoring on landscape level, <u>Southern Forest Futures Project</u> • Tax Abatements and Land Use Tax Regimes by jurisdiction drive land use determinations • Fiber purchase agreement • Internal and external sustainability audits • <u>State Forest Action Plans</u> • <u>F2M’s Historical Perspective on the Relationship between Demand and Forest Productivity in the US South</u>
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • BMPs are in place for all States that Drax sources wood. In addition, SFI committees operate in all these states and provide training for loggers and on State BMP requirements. • Fiber Purchase Agreement obligates supplier to abide by all laws and regulations, BMPs, use trained loggers and follow sustainability policy. • Federal cost-share assistance programs for forestry projects include the Forestry Incentive Program, the Conservation Reserve Program, the Wetlands Reserve Program, the Stewardship Incentives Program, the Environmental Quality Incentives Program, and others administered by the NRCS. • Louisiana, Mississippi, Alabama Texas and Oklahoma established forestry cost-share programs in 1998, 1974, 1975, 1981 and 1998 respectively. Arkansas does not currently have a tax program in place. However, Arkansas does have a Wetland and Riparian Zone Tax Credit as well as other incentives for forestry and agriculture. Cost-share programs are designed to help NIPF landowners by reducing their initial costs for reforestation and improving rates of return. • Arkansas (1978), Louisiana (1976), Mississippi (1980), Alabama (1975) Texas (1979) and Oklahoma (1998) all have some variant of current use laws in place for forestry activities. • Federal PR statutes affecting forest management in the South listed in CWRA. • Federal Endangered Species Act • State Wildlife Action Plans (SWAPS) are in place for all states from which DBI sources. These plans are administered by the state wildlife agencies in cooperation with a diverse stakeholder group representing other state agencies, federal agencies, private conservation organizations, and industry partners. They identify key natural habitats and sensitive species to cooperatively address protection. Federal dollars, available to states with active SWAPS allow states to actively seek out areas to protect through purchase and/or easement. • States have developed Pesticide General Permits to meet the CWA requirements around controlled pesticide use. This permit applies to private entities applying forest

	<p>pesticides (i.e. herbicides) and provides an additional level of assurance that chemical use is carefully planned to minimize harm to the environment.</p> <ul style="list-style-type: none"> • State water quality programs, designed to meet the CWA requirements, monitor the effectiveness of harvest planning and BMP implementation. • Available information on location of HCVs is reviewed per company sustainability policy, to avoid impact to species or habitats of concern. • External audit, Internal audit and monitoring all provide checks on the effectiveness of the assessment of impacts and implementation of controls. • Supply base includes a significant portion of land certified to the SFI and ATFS standards which require the presence of a forest management plan. • Supply base includes a significant number of SFI Certified Sourcing facilities, so it is highly likely that some component of each harvest goes to an SFI CS facility. This requires assessment of impacts, and planning, implementation and monitoring. • For secondary and tertiary feedstocks, Federal and State legislation, and regional practices (e.g. prevalence of SFI FS, ubiquity of trained loggers etc), coupled with DBI's contractual requirements and regular assessment of supplier performance, provide assurance there is low risk of non-compliance with this requirement for these feedstocks. This is also supported by consultation responses which do not identify issues.
<p>Means of Verification</p>	<p>Lead Verifier: Key ecosystems are protected under various Federal and State programs. Hydrologic systems are protected by the <u>Clean Water Act</u>. The presence of market driven and <u>sanctioned logger training curriculums</u> and acceptable BMP implementation rates (<u>The National Association of State Foresters 2015 BMP report</u>) found Nationwide implementation rates of 91%). Landowner assistance programs present, available and effective through State and extension services.</p> <ul style="list-style-type: none"> • The existence of, and effective application of, state and federal legislation is a key verifier. Suppliers and forest landowners located within the defined fiber catchments operate in a social system upheld by the "rule of law". The US is in the 90th percentile for rule of law, giving confidence to the rule of law as a control (see Preamble citations). • Management systems, internal processes and company policies governing these aspects reviewed internally and as part of third party certifications audits. • Regular review of supplier performance • <u>NEPA Annual Reports</u> • <u>State BMP Manuals</u> • <u>Federal cost-share programs for forestry</u> projects include the Forestry Incentive Program, the Conservation Reserve Program, the Wetlands Reserve Program, the Stewardship Incentives Program, the Environmental Quality Incentives Program, etc. • <u>National Conservation Easement Database</u> • <u>USFWS Critical Habitat Map</u> • <u>State level cost share programs for forestry</u> States have version of current use laws for forestry activities State Forest Fact Sheets, Ex <u>Mississippi</u> Tax Abatements and Land Use Tax Regimes by jurisdiction Ex. <u>Arkansas forestry manual</u> • Logger training report, SGSF & SFI • DBI's DDS • SBP SBE • FSC National CWRA • Fiber Purchase Agreement • SFI FM landowners, certificates and general locations verified through SFI website
<p>Evidence Reviewed</p>	<ul style="list-style-type: none"> • All means of verification reviewed

Risk Rating	<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk RA <input type="checkbox"/> Unspecified Risk at RA
Comment or Mitigation Measure	None
	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	<ul style="list-style-type: none"> All five States that Drax sources wood from have BMP guidelines. These BMPs are in place for water quality but also include recommendations for effective planning for soil stabilization during all phases of silviculture. Years of research has demonstrated the effectiveness of water quality BMPs, with documented implementation rates for covered practices often approaching 90%. Numerous studies by Federal and State level forestry agencies and researchers have indicated that following BMP reduces the loss of soils, soil compaction, and soil migrating into water bodies. Biomass markets provide support to landowners owning and managing forests therefore attributing to the soil quality due to the presence of the forest. Responsible disturbance of the forest is needed to provide regeneration in all forest types therefore continuing to add to soil productivity. One study found that soil compaction had a positive effect on stand volume and caused no substantial reduction in soil C storage or understory diversity (Soil Ecosystem Services in Loblolly Pine Plantations 15 Years after Harvest, Compaction, and Vegetation Control, Soil Science Society of America Journal October 31, 2014 Scott et al) DBI Fiber Purchase Agreement mandates that Sellers follow good and accepted forestry practices and agrees to abide by BMPs. Suppliers are subject to audit. Evidence that SFI Fiber Sourcing leads to improved implementation rates for BMP's is provided <i>in this study based in Georgia - Effects of the sustainable forestry initiative fiber sourcing standard on the average implementation rate of forestry best management practices in Georgia, United States</i> For secondary and tertiary feedstocks, regional practices (e.g. BMPs and prevalence of SFI FS, ubiquity of trained loggers etc), coupled with DBI's contractual requirements and regular assessment of supplier performance, provide assurance there is low risk of non-compliance with this requirement for these feedstocks. This is also supported by consultation responses which do not identify issues. A literature review conducted by the National Council of Air and Stream Improvement (1992), as well as studies by Rajja (2003), Johnson (1992), and Johnson and Curtis (2001) found that the "categorical assumption" of soil carbon loss due to harvesting is unwarranted.
Means of Verification	<p><u>Leading Verifier</u> Best Management Practices for forestry are established in each jurisdiction and monitored to achieve compliance to the Clean Water Act. Company sustainability programs include internal BMP audit protocol verified by external 3rd party certification audits.</p> <ul style="list-style-type: none"> SFI State Implementation Committees have active Inconsistent Practices Committees to limit sourcing from loggers violating BMPs. <u>High levels of trained loggers</u> are present due to market requirement. A catalogue of enforceable laws contributes to the maintenance of these attributes. <ul style="list-style-type: none"> <u>USGS Soil Maps</u> <u>Protected Areas of the US</u>

	<ul style="list-style-type: none"> • BMP Implementation Compliance Data, Southern Group of State Foresters • Almanac of Enforceable State Laws to Control Nonpoint Source Water Pollution • NCASI Technical Bulletin No. 966: Compendium of Forestry BMPs for Controlling Nonpoint Source Pollution in N.A. • How Forestry is Regulated Under the Clean Water Act, • AFOA Soil Ecosystem Services in Loblolly Pine Plantations 15 Years after Harvest, Compaction, and Vegetation Control, Soil Science Society of America Journal October 31, 2014 Scott et al • Implementation of Forestry BMPs: A Southern Region Report, 2008 and 2012 • State BMP Manuals • Fiber Purchase Agreement • F&W BMP Implementation Report for DBI’s Procurement Region, 2015,017 & 2018.
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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • The FSC US Controlled Wood Risk Assessment has identified 4 ecosystems that appear within DBI’s catchment – Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems, Southern and Central Appalachian Critical Biodiversity Areas– that have been designated as “specified risk”. This designation gives rise to mitigations as stated in 2.1.2 above. • Internal (procedural) controls and external (regulatory and certification related) controls and evidence exist to demonstrate and/or provide protection of key ecosystems and habitats. These include but are not limited to: <ul style="list-style-type: none"> ○ The Protected Area Database of the United States provides “a critical inventory of protected lands available to a range of audiences from the general public to the land managers about the status land and water protection in the United States”. They state: <i>“Through protected area designations, land and water are set aside in-perpetuity to preserve functioning natural ecosystems, act as refuges for species, provide public access to recreation and the preservation of natural historic sites”</i>. ○ DBI has at its disposal a robust DDS with data provision from NatureServe, various other public agencies, and NGOs to assess sensitives with the procurement catchment. ○ DBI has implemented a Rapid Risk Review procedure to identify potentially sensitive areas and implement effective controls. ○ Comprehensive wildlife action plans (inclusive of habitat considerations) have been established for each state. Effective and enforced environmental laws on the national and state levels are in place to ensure conservation of special resources. ○ Nearly two-thirds of the estimated increase in special-use land from 2002-07 was a result of a nearly 10-million-acre increase in rural parks and

	<p>wildlife/wilderness land. Driving this number are substantial increases in federally owned outdoor recreation and preservation areas, <u>Major Uses of Land in the United States, 2007</u>.</p> <ul style="list-style-type: none"> ○ State-owned fish and wildlife areas, and State parks, are sited in key eco-systems and provide effective protections. ○ Effective and enforced environmental laws on the national and state levels are in place to ensure conservation of special resources. ○ Preamble citations including Worldwide Governance Indicators ○ External audit, Internal audit and monitoring provide checks on the effectiveness of controls. ○ For secondary and tertiary feedstocks, regional practices (e.g. Availability of PAD information, state and federally protected areas and prevalence of SFI FS (which requires access to NatureServe information) ubiquity of trained loggers etc), coupled with DBI's contractual requirements and regular assessment of supplier performance, provide additional controls for this requirement for these feedstocks.
<p>Means of Verification</p>	<p><u>Lead Verifier</u> The FSC US Controlled Wood Risk Assessment and maps of key ecosystems identified as Specified Risks. Maps of key ecosystems and habitats set aside and <u>protected on federal and state lands</u>. Private lands with key ecosystems and habitats are assisted with various Federal and State programs and many are placed under voluntary conservation easements.</p> <ul style="list-style-type: none"> • DBI's Rapid Risk Review process • Explicit protection of these attributes are delivered by well governed public agencies and reputable <u>Non-Governmental Conservation Groups</u>. • Existence and application of conservation laws such as <u>Endangered Species Act</u> and the <u>Clean Water Act</u>. • The <u>Endangered Species Protection Program</u>, State and Federal Versions Examples of Federal Legislation and Programs: Clean Water Act (section 404 for wetland protection) requires permit for permanent fill placed into wetlands, Standards Grants Program, Forest Resource Development Program (FRDP), The Landowner Incentive Program (LIP), North American Wetland Conservation Act Grants (NAWCA),The Conservation Reserve Program (CRP),Environmental Quality Incentives Program (EQIP), Healthy Forest Reserve, The Wetlands Reserve Program (WRP), The Wildlife Habitat Incentives Program (WHIP), Mississippi Partners for Fish and Wildlife Program (MPFW), The Army Compatible Use Buffer Program (ACUB), USFWS Safe Harbor program, Convention on Nature Protection • Preamble citations including Worldwide Governance Indicators • Examples of State Programs: The Mississippi Scenic Streams Stewardship Program (SSSP) and SGCN dependent on forest communities (See Appendices III, IV and V), The State Wildlife Grants Program (SWG), The Mississippi Natural Heritage Program (MNHP),CHAPTER 4: EXISTING CONSERVATION PROGRAMS FOR FOREST RESOURCES, MISSISSIPPI'S FOREST LEGACY PROGRAM, Mississippi Wildlife Heritage Fund, Mississippi Partners for Fish and Wildlife Program (MPFW) • <u>Global Forest Watch</u> • <u>Federal and State Land Ownership and Jurisdiction</u> <u>National Conservation Easement Database</u> <u>USFWS Critical Habitat Map</u> • Company CWRA and DDS • Internal and external sustainability audits • SBE • <u>Stakeholder Consultation</u> • Operational Control Procedure • Fiber Purchase Agreement

	<ul style="list-style-type: none"> • Clean Water Act (section 404 for wetland protection): requires permit for permanent fill placed into wetlands • Protected areas of the US Map • <u>Logger Training Programs Report</u> • <u>NEPA Annual Reports</u> • <u>State Forest Action & Wildlife Plans</u> •
Evidence Reviewed	<ul style="list-style-type: none"> • All means of verification reviewed
Risk Rating	<input type="checkbox"/> Low Risk <input checked="" type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA
Comment or Mitigation Measure	<p>FSC US has identified, and developed mitigation measures, for four key ecosystems, Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems, Southern Appalachian Critical Biodiversity Area, and the Central Appalachian Critical Biodiversity Areas.</p> <p>DBI has integrated the FSC HCV maps into its GIS system and screens all suppliers for their intersection with the Specified Risks identified by FSC. Mitigation for primary feedstock includes controls embedded in DBI’s internal processes which are subject to monitoring and internal audit. DBI does not have line of sight to individual tracts that provide fiber to secondary and tertiary feedstock suppliers, so other mitigations are appropriate. The following provides an overview of mitigations chosen for each FSC Specified risk:</p> <p><u>Late Successional Bottomland Hardwoods (LSBH)</u> As DBI primarily sources Southern Yellow Pine, Late Successional Bottomland Hardwoods are mainly an issue for residual suppliers who use hardwoods and are proximate to LSBH areas. The areas that potentially have LSBH have been mapped by FSC and integrated into DBI’s GIS system and RRA procedures. For residual suppliers, outreach and education will be the choice mitigation tool. For primary suppliers, information is collected on forest type and species is collected for all harvests. If a forest tract is identified as having a high hardwood component the site will be evaluated to determine if it is a LSBH tract. No fiber will be sourced from harvests that endanger the health, vigour, and long-term persistence of these bottomland hardwood tracts. In addition, educational materials will be provided which will attempt to engage landowners, foresters, and loggers in conservation of this forest system.</p> <p><u>Native Longleaf Pine Systems (NLPS)</u> For NLPS, the areas at risk have been identified by FSC at county/parish level. These areas have been included in the GIS system and RRA process. For primary suppliers, information is collected on forest type and species. If longleaf pine is present on the tract DBI will evaluate the tract and determine the regeneration plans for the site. Educational materials will be provided. If conversion of a LSBH is suspected fiber will not be sourced from the tract. Education and outreach will be the primary mitigation for residual suppliers who’s sourcing are intersects FSC identified risk areas. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of Native Longleaf Pine systems.</p> <p><u>Southern and Central Appalachian Critical Biodiversity Area (CACBA & SACBA respectively)</u> Both the Central and Southern Appalachian Critical Biodiversity Areas will only affect DBI’s residuals sourcing due to the distance from existing pellet mills. Education and outreach will be the mitigation tool employed. As described for the risks above, these materials will be developed according to best available science</p>

	<p>and be adapted as new information and approaches come available (i.e. through FSC CW Regional meetings). This educational material will be aimed at increasing awareness of the sensitivities and unique nature of these CBAs in hopes of increasing conservation of these highly biodiverse areas.</p> <p>Other Relevant Internal Procedures: DBI utilizes Failure Mode Effects Analysis (FMEA) to develop a risk profile of secondary suppliers. Location of sourcing area in reference to known HCVs, mill sourcing profile (species mixed used), and certification status are a few key criteria that influence risk rank and direct level of engagement and internal audit.</p> <p>DBI's Sustainability and Procurement team conduct supplier reviews every six months to discuss the results of FMEA analysis and information gained through Residual Supplier Questionnaires (formal guided check-ins performed at a minimum annually). Analysis of the existing matrix of SFI FS certified mills and suppliers is also reviewed. Currently DBI's supply base is over 90% covered by the reach of other SFI certified mills, significantly reducing the risk of sourcing non-compliant material. DBI is active in SFI State Implementation Committees (SICs) and actively shares and acts on information relevant to sustaining a high level of sustainability compliance in the supply basin. DBI also communicates findings and trends gained through SIC participation and internal audit of primary suppliers directly with mills from which residuals are sourced.</p> <p>If it is determined that the risk of negative impact to the HCV cannot be effectively mitigated through information flow and internal controls DBI can choose not to accept material from a region or a supplier.</p> <p><i>DBI's existing programmatic procedures combined with the mitigations described above are sufficient to bring the risk of non-compliance with this requirement to "low".</i></p>
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	Indicator
2.2.4	The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	<ul style="list-style-type: none"> • The FSC US National Risk assessment has identified that there are five "specified risks" within DBI's sourcing area. They include Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems, and the Dusky Gopher Frog, Southern Appalachian Critical Biodiversity Area, and Central Appalachian Biodiversity Area • Internal (procedural) controls and external (regulatory and certification related) controls and evidence exist to demonstrate and/or provide protection of key ecosystems and habitats. These include but are not limited to: <ul style="list-style-type: none"> ○ The <u>Protected Area Database</u> of the United States provides "a critical inventory of protected lands available to a range of audiences from the general public to the land managers about the status land and water protection in the United States". They state: <i>"Through protected area designations, land and water are set aside in-perpetuity to preserve functioning natural ecosystems, act as refuges for species, provide public access to recreation and the preservation of natural historic sites"</i>. ○ DBI has at its disposal a robust DDS with maps and data provision from NatureServe, various other public agencies, and NGOs, to identify the

	<p>presence of species and habitats of concern within the procurement catchment.</p> <ul style="list-style-type: none"> ○ Federal as well as state laws exist to protect native, endemic, and vulnerable species and habitats (ESA and state wildlife protection laws). ○ Private sector firms comply with mandatory laws and with voluntary guidelines. ○ Forest certification provides a clear means to demonstrate that private and public forestry organizations adhere to existing state and federal protections and implement additional safeguards to protect biodiversity ○ State BMPs designed to meet CWA requirements provide protection for aquatic biodiversity, and frequent surveys have found that BMP compliance rates are very high (>90%). ○ In all states sourced from, information about species of outstanding and exceptional value is requested from natural heritage databases and state wildlife action plans are considered ○ External audit, internal audit and monitoring processes, and regular assessment of supplier performance are additional controls. ○ For secondary and tertiary feedstocks, Federal and State laws, regional practices (e.g. Availability of PAD information, state and federally protected areas and prevalence of SFI FS which requires access to NatureServe information ubiquity of trained loggers etc), coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for this requirement for these feedstocks.
<p>Means of Verification</p>	<p><u>Lead Verifier</u> The existence and implementation of the federal ESA, state wildlife protection laws, compliance with CWA (aquatic species protection) through high levels of BMP implementation. Note World Governance Index provides assurance that the rule of law is effective.</p> <ul style="list-style-type: none"> • Forest certification programs focused on biodiversity which influence the supply chain and encourage high levels of logger training of acts like <u>ESA</u> amongst a plethora of conservation efforts administered by well governed agencies. • <u>High levels of trained loggers</u> educated in these subjects present due to market requirements. • DBI's Rapid Risk Assessment process demonstrates effective utilization of NatureServe data. • Contractual requirements in DBI's Fiber Purchase Agreement requiring compliance with legislation • Regular review of supplier performance. • <u>USDA National Report on Sustainable Forests—2010 Pg. II-121</u> • <u>Habitat Conservation Plans, Annual Funding of Awards & Status Report</u> • <u>Agricultural and Forestry Extension Services</u> • <u>SFI & American Forest Foundation, Conservation and Research Grants</u> • <u>The Endangered Species Protection Program, State and Federal Versions</u> • Examples of Federal Legislation and Programs: Forest Resource Development Program (FRDP), The Landowner Incentive Program (LIP), North American Wetland Conservation Act Grants (NAWCA), The Conservation Reserve Program (CRP), Environmental Quality Incentives Program (EQIP), Healthy Forest Reserve, The Wetlands Reserve Program (WRP), The Wildlife Habitat Incentives Program (WHIP), The Army Compatible Use Buffer Program (ACUB), USFWS Safe Harbor program, Convention on Nature Protection and Resource Conservation & Recovery Act (RCRA) (1976, 1984), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, commonly known as "Superfund") (1980, 1986) and Migratory Bird Treaty Act (1918, 2006)

	<ul style="list-style-type: none"> • Preamble citations including Worldwide Governance Indicators • Examples of State Programs: The Mississippi Scenic Streams Stewardship Program (SSSP) and SGCN dependent on forest communities (See Appendices III, IV and V), The State Wildlife Grants Program (SWG),MISSISSIPPI'S FOREST LEGACY PROGRAM, The Mississippi Natural Heritage Program (MNHP),CHAPTER 4: EXISTING CONSERVATION PROGRAMS FOR FOREST RESOURCES, Mississippi Partners for Fish and Wildlife Program (MPFW), Mississippi Wildlife Heritage Fund, Mississippi Partners for Fish and Wildlife Program (MPFW). • Examples of treaties and conventions which the U.S. is a signatory: Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere (Washington, DC, 1940), Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar, Iran, 2 Feb 1971), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington DC, 1973), International Plant Protection Convention (IPPC) (1979 Revised Text) (Rome, Italy, 1979), Convention on the Conservation of Migratory Species of Wild Animals (Bonn, Germany, 23 Jun 1979). • USFWS Endangered Species Listing • DBI's DDS • Avoidance of Biodiverse Areas procedure • Internal and external sustainability audits • USDA National Report on Sustainable Forests—2010 Pg. II-121 • SFI Evidence Matrix • F&W BMP Compliance Report • HCP Annual Funding of Awards & Status Reports • Logger Training Programs Report • Natural Heritage Databases via NS: State Fish and Wildlife Agencies and Natural Heritage Programs • Environmental Law Institute <p>The FSC US Controlled Wood Risk Assessment has identified 2 ecosystems that appear within DBI's catchment – Late Successional Bottomland Hardwoods, and Native Longleaf Pine Systems – that have been designated as “specified risk”. This designation gives rise to mitigations as stated in 2.1.2 above.</p>
Evidence Reviewed	<ul style="list-style-type: none"> • All means of verification reviewed
Risk Rating	<input type="checkbox"/> Low Risk <input checked="" type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA
Comment or Mitigation Measure	<p>FSC US has identified, and developed mitigation measures, for five sensitivities which are relevant to secondary and tertiary suppliers - Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems, Southern Appalachian Critical Biodiversity Area, Central Appalachian Critical Biodiversity Area, and the Dusky Gopher Frog.</p> <p>DBI has integrated the FSC HCV maps into its GIS system and screens all suppliers for their intersection with the Specified Risks identified by FSC. Mitigation for primary feedstock includes controls embedded in DBI's internal processes which are subject to monitoring and internal audit. DBI does not have line of sight to individual tracts that provide fiber to secondary and tertiary feedstock suppliers, so other mitigations are appropriate. The following provides an overview of mitigations chosen for each FSC Specified risk:</p> <p><u>Dusky Gopher Frog (DGF)</u> For the Dusky Gopher Frog, FSC identifies two small areas at the extreme south of our sourcing area. The DGF will only be relevant to a subset of DBI's residual suppliers. FSC has identified education and outreach as a mitigation option for the DGF. DBI will provide educational materials to the suppliers which have the</p>

potential to source from the FSC identified risk areas. Educational materials will be informed by the best available science and adapted as new information and/or approaches become available. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of DGF populations.

Late Successional Bottomland Hardwoods (LSBH)

As DBI primarily sources Southern Yellow Pine, Late Successional Bottomland Hardwoods are mainly an issue for residual suppliers who use hardwoods and are proximate to LSBH areas. The areas that potentially have LSBH have been mapped by FSC and integrated into DBI's GIS system and RRA procedures. For residual suppliers, outreach and education will be the choice mitigation tool. For primary suppliers, information is collected on forest type and species is collected for all harvests. If a forest tract is identified as having a high hardwood component the site will be evaluated to determine if it is a LSBH tract. No fiber will be sourced from harvests that endanger the health, vigour, and long-term persistence of these bottomland hardwood tracts. In addition, educational materials will be provided which will attempt to engage landowners, foresters, and loggers in conservation of this forest system.

Native Longleaf Pine Systems (NLPS)

For NLPS, the areas at risk have been identified by FSC at county/parish level. These areas have been included in the GIS system and RRA process. For primary suppliers, information is collected on forest type and species. If longleaf pine is present on the tract DBI will evaluate the tract and determine the regeneration plans for the site. Educational materials will be provided. If conversion of a LSBH is suspected fiber will not be sourced from the tract. Education and outreach will be the primary mitigation for residual suppliers who's sourcing are intersects FSC identified risk areas. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of Native Longleaf Pine systems.

Southern and Central Appalachian Critical Biodiversity Area (CACBA & SACBA respectively)

Both the Central and Southern Appalachian Critical Biodiversity Areas will only affect DBI's residuals practices due to the distance from existing pellet mills. Education and outreach will be the mitigation tool employed. As described for the risks above, these materials will be developed according to best available science and be adapted as new information and approaches come available (i.e. through FSC CW Regional meetings). This educational material will be aimed at increasing awareness of the sensitivities and unique nature of these CBAs in hopes of increasing conservation of these highly biodiverse areas.

Other Relevant Internal Procedures:

DBI utilizes Failure Mode Effects Analysis (FMEA) to develop a risk profile of secondary suppliers. Location of sourcing area in reference to known HCVs, mill sourcing profile (species mixed used), and certification status are a few key criteria that influence risk rank and direct level of engagement and internal audit.

DBI's Sustainability and Procurement team conduct supplier reviews every six months to discuss the results of FMEA analysis and information gained through **Residual Supplier Questionnaires** (formal guided check-ins performed at a minimum annually). Analysis of the existing matrix of SFI FS certified mills and suppliers is also reviewed. Currently DBI's supply base is over 90% covered by the reach of other SFI certified mills, significantly reducing the risk of sourcing non-compliant material. DBI is active in SFI State Implementation Committees (SICs) and actively shares and acts on information relevant to sustaining a high level of sustainability compliance in the supply basin. DBI also

	<p>communicates findings and trends gained through SIC participation and internal audit of primary suppliers directly with mills from which residuals are sourced.</p> <p>If it is determined that the risk of negative impact to the HCV cannot be effectively mitigated through information flow and internal controls DBI can choose not to accept material from a region or a supplier.</p> <p><i>DBI's existing programmatic procedures combined with the mitigations described above are sufficient to bring the risk of non-compliance with this requirement to "low".</i></p>
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	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	<ul style="list-style-type: none"> • DBI conducts a DDS with annual review of effectiveness. • BMPs as they stand encourage the use and distribution of logging slash across sites for nutrient distribution and to prevent soil erosion. Biomass retention happens naturally due to this beneficial reuse of slash. • Model biomass retention guidelines are available in some states (i.e. MS Biomass Harvesting Guidelines). Work is being completed to encourage the development of such guidelines. Although, a recent study completed on hardwood harvests concluded with no change in BMP effectiveness between traditional clearcuts and biomass harvests: • <u>Research demonstrates</u> that soil nutrients are maintained during biomass harvests awaiting further study according to the studies cited in this blog: http://offers.forest2market.com (Tree Harvesting and its Effect on Soil Nutrients) • Recent NCASI studies testing the effectiveness of biomass retention guidelines found that all treatments, including traditional woody biomass harvest with no specific retention targets, exceeded by at least three-fold the Forest Guild's recommended minimum volume of DWD to be retained following a woody biomass harvest in the Piedmont and Coastal Plain physiographic regions of the USA. • NCASI Biomass retention study also investigated the impact on birds, small mammals, and soil properties, finding retention levels had limited effects • SFI Performance Measure 2.2 requires BMP Monitoring across the wood and fiber supply area. • Communication with SFI SICs about biomass harvesting guideline development • The US Protected Area Database contains information about protected lands that was published in April 2009 Technical Bulletin 966 (September 2009) issued by the National Council for Air and Stream Improvement (NCASI) has reported high levels of compliance with water quality laws and BMP requirements across the U.S • External audit, internal audit and monitoring processes, • For secondary and tertiary feedstocks, there are no exceptional pressures that might exacerbate residue removal. For these suppliers, Federal and State laws, regional practices coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for this requirement for these feedstocks.
Means of Verification	<p><u>Lead Verifier</u></p> <p>Best Management Practices for forestry are established in each jurisdiction and contain guidance encouraging retention of slash for erosion control and forest productivity (high level of BMP implementation).</p>

	<ul style="list-style-type: none"> • Forest industry and conservation groups' support of biodiversity protection through research (i.e. NCASI biomass retention studies). Internal sustainability programs and external 3rd party certification audits verify resource protection. • <u>BMP manuals across the southern states</u> • DBI's BMP monitoring program • State Level BMP Implementation Reports: <u>Aggregated periodic report by SGSFs.</u> • SFI Performance Measure 2.2 requires BMP Monitoring across the wood and fiber supply area. • Email from LA SIC to consider biomass harvest guidelines in BMP revision. • SFI SIC communications • <u>Stewardship Forest Program</u> & other forest landowner assistance programs as listed in 2.2.4 • <u>Pinchot Institute compendium of biomass harvesting research</u> • <u>Soil and Water Resources Conservation Act (RCA)</u> • <u>Clean Water Act</u> • <u>Web Soil Survey</u> • <u>USDA National Report on Sustainable Forests—2010 Pg. II-121</u> • Habitat Conservation Plans, <u>Annual Funding of Awards & Status Report</u> • Agricultural and Forestry Extension Services in each jurisdiction • <u>SFI & American Forest Foundation</u>, Conservation and Research Grants • Internal and external audits • The <u>US Protected Areas Database</u> contains information about protected lands • State <u>Wildlife</u> Action Plans • <u>Technical Bulletin 966 (September 2009)</u> issued by the National Council for Air and Stream Improvement (NCASI), has reported high levels of compliance with water quality laws and BMP requirements across the U.S <p>For secondary and tertiary feedstocks, there are no exceptional pressures that might exacerbate residue removal. For these suppliers, Federal and State laws, regional practices coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks.</p>
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	Indicator
2.2.6	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).
Finding	<ul style="list-style-type: none"> • All states that DBI procures from have agencies and regulatory programs to monitor and enforce environmental law. • State Forestry BMPs are in place that meet the requirements of the Clean Water Act (CWA). State forestry commissions, forestry services and/or divisions of agriculture continuously monitor BMP effectiveness, respond to public water quality complaints, and work with state environmental protection agency, (responsible for CWA regulatory compliance)

	<ul style="list-style-type: none"> • Fiber Purchase Agreement requires conformance with the Sustainability Policy & implementation of BMPs. • Many studies have been conducted on BMP effectiveness to reduce non-point pollution from Forestry operations. Results from a 2016 literature review found that forestry BMPs minimize water quality effects of forest operations when implemented as recommended by state forestry agencies (Effectiveness of forestry best management practices in the United States, Cristan et al.) • SFI partners with state forestry commissions to conduct logger training on BMP's. Trained loggers help insure that water quality is maintained and protected on certified and non-certified lands • SFI's State Implementation Committees (SICs) regularly review and investigate public BMP complaints received via their inconsistent practices procedure and alert consuming mills of bad performers • The National Association of State Foresters 2015 BMP report found BMP Nationwide implementation rates of 91% SFI Forest Management Standard, Objective 3 requires the protection and maintenance of water resources and water quality on all certified lands. • <u>State Forestry BMP guidelines</u> for water quality provide a level of protection against CWA regulatory action. Therefore, it would be a high-risk decision for a harvester to not implement these guidelines. • State BMPs designed to meet CWA requirements provide protection for aquatic biodiversity, and frequent surveys have found that BMP compliance rates are very high (>90%). • SFI Fiber Sourcing Standard Objective 2 requires adherence to BMPs • FSC Principle 6: Environmental Impact • ATFS Standard 4: Air, Water and Soil Protection • Protected areas are identified by state and federal agencies which establishes even higher levels of sensitivity and enforcement of attributes such as waste management, BMPs and aesthetics. • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws, and regional practices coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks.
<p>Means of Verification</p>	<p><u>Lead Verifier</u> <u>Best Management Practices</u> for forestry are established in each jurisdiction and monitored to achieve compliance to the <u>Clean Water Act</u>. <u>High participation rates in sanctioned logger training programs</u> present due to market drivers. Hydrologic systems are protected by the <u>Clean Water Act</u>. The presence of market driven and <u>sanctioned logger training curriculums</u> and <u>acceptable BMP implementation rates</u> (The National Association of State Foresters 2015 BMP report found BMP Nationwide implementation rates of 91%)</p> <ul style="list-style-type: none"> • BMP studies, see <u>Effectiveness of forestry best management practices in the United States, Cristan et al. 2016</u> • <u>State BMP Monitoring Reports</u> <u>f2m bmp compliance blog</u> <u>State Forestry and Wildlife Action Plans</u> • Monitoring of primary feedstock harvesting tracts • Contractual requirements for supplier • Regular review of supplier performance. • SFI, FSC, ATFS Standards • SFI Evidence Matrix • F&W BMP Compliance Report State BMP survey results (i.e. MS state BMP survey results: <u>MS 2016 BMP Survey</u>) • SFI Performance Measure 2.2 requires BMP Monitoring across the wood and fiber supply area

	<ul style="list-style-type: none"> The US Protected Area Database contains information about protected lands. State <u>Wildlife</u> Action Plans <u>Technical Bulletin 966 (September 2009)</u> issued by the National Council for Air and Stream Improvement (NCASI) has reported high levels of compliance with water quality laws and BMP requirements across the U.S
Evidence Reviewed	<ul style="list-style-type: none"> All means of verification reviewed
Risk Rating	<input type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA
Comment or Mitigation Measure	Note that some stakeholder concerns have been raised regarding CWA enforcement capabilities in LA. A significant weakness is perceived as existing in the wetlands of the Atchafalaya Basin. As DBI does not source from these wetlands, no mitigation is necessary.

	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>All states DBI sources from have environmental compliance and monitoring agencies with ample levels of enforcement.</p> <ul style="list-style-type: none"> List of 156 Mandatory Class I Federal Areas include 2 areas in Arkansas and 1 area in Louisiana. The Clean Air Act sets standards for air quality to protect public health and welfare. The Forest Service must ensure that its activities, or activities it permits, comply with these national standards and any State and local requirements for air pollution control. States develop State Implementation Plans (SIPs) describing how they will implement the requirements of the Clean Air Act. The Clean Air Act also charges the U. S. Forest Service as a Federal Land Manager of Class I areas, to protect air quality related values in the wilderness areas of a specified size. Fiber Purchase Agreement Section 7 Compliance with Laws, Section 8 Forestry Practices Drax policies for dust control, air permits for mills and port. Market provision for biomass provides a reduction in forest fire risk and in return reduced prescribed burns to reduce fuel load. Burn permits or licenced prescribed fire applicator is required in all states DBI procures biomass. Smoke management guidelines provided by forestry commissions. <u>Interagency Fire Prevention Strategy</u>: This strategy follows on the successes guided by the 2000 Southern Wildfire Prevention Strategy that focused on debris burning and homeowner safety in the wildland urban interface. External audit, internal audit and monitoring processes. For secondary and tertiary feedstocks, Federal and State laws, and regional practices coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks.
Means of Verification	<p><u>Lead Verifier</u> Public agencies enforce regulations that govern air quality and provide resources to mitigate risks.</p> <ul style="list-style-type: none"> Intrinsic values of forest management <u>"Clean Air Act"</u> Dept. of Environmental Quality in each jurisdiction

	<p>Smoke management guidelines governed by forestry commissions by jurisdiction <u>State Forest & Wildlife Action Plans</u> <u>Interagency Fire Prevention Strategy DBI Environmental Permits by state</u></p> <ul style="list-style-type: none"> i.e. <u>LA Burn Permit, MS Burn Permit, AR Burn Permit, AL Burn Permit, TX Burn Permit, OK Burn Permit</u>
Evidence Reviewed	<ul style="list-style-type: none"> 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> SFI Indicator 2.2.4: The World Health Organization (WHO) type 1A and 1B pesticides shall be prohibited, except where no other viable alternative is available. SFI Indicator 2.2.5: Use of pesticides banned under the Stockholm Convention on Persistent Organic Pollutants (2001) shall be prohibited. State-level BMPs typically restrict application to non-riparian zones. The use of class 1A and 1B pesticides, as drafted by the World Health Organisation, and of chlorinated hydrocarbons are not used in the DBI procurement area. State Applicator License Programs Chemical use in forest stands, whether for insect control or for vegetation management, is regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The US Environmental Protection Agency (EPA) has responsibility for implementing and enforcing FIFRA. All forest-use chemicals must be EPA-registered and forest land operators must follow application guidelines prescribed for each chemical. States have developed Pesticide General Permits to meet the CWA. Applicators and Landowners must follow Permit guidance, further ensuring the proper application of forest pesticides. External audit, internal audit and monitoring processes <p>For secondary and tertiary feedstocks, Federal and State laws, and regional practices coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks.</p>
Means of Verification	<p>Leading Verifier: Legislative requirements and public agencies govern these elements. Agencies offer educational services and require licensing. Inherit benefits of thinning encouraged by biomass markets.</p> <ul style="list-style-type: none"> Legislation recognised as effective in this geography (see World Governance Index) State Pesticide Applicator License Programs NRCS, IPM Conservation Practice Std USDA, Risk Assessment WS for Pesticides SFI 2015-2019 Std BMPs by State Listing Federal and State Depts of Environmental Quality

	<ul style="list-style-type: none"> • Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) • Pesticide Applicator Training, Licensing and regulations by jurisdiction • NRCS, IPM Standard • Noxious Weed Grant Programs • Monitoring of effectiveness of controls through SIC • Monitoring of harvested tracts. • MS Pesticide Applicator Training • MS Weed and Pest Control Licensing • LA Herbicide Restrictions • LA Pesticide Licensing & Certs • AR Commercial Applicator for Pesticides • AL Weed and Pest Control Licensing • OK Pesticide Applicators • State Pesticide General Permits (PGPs)
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • Solid Waste Disposal Act of 1986: Persons or organizations violating compliance orders for management of hazardous wastes subject to civil and criminal penalties ranging from maximums of \$25,000 to \$1,000,000 and from two to 15 years imprisonment.
Means of Verification	<p><u>Lead Verifier</u> Public agencies govern compliance of these elements. <u>Best Management Practices</u> for forestry are established by jurisdiction and monitored to achieve compliance to the <u>Clean Water Act</u>. <u>High levels of trained loggers</u> are present due to market requirements.</p> <ul style="list-style-type: none"> • Fiber Purchase Agreement and contractual requirements. • <u>Solid Waste Disposal Act</u> <u>Resource Conservation and Recovery Act of 1976 (RCRA)</u> Depts. of Environmental Quality by jurisdiction • External audit, internal audit and monitoring processes, • For secondary and tertiary feedstocks, Federal and State laws, and regional practices coupled with DBI’s contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks.
Evidence Reviewed	<ul style="list-style-type: none"> • 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

Comment or Mitigation Measure	None
-------------------------------	------

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	<ul style="list-style-type: none"> • Plethora of research studies and reports overwhelmingly determine that forest management is driven by markets and with measured demand and due diligence then forests flourish. • Improved silviculture practices including improved seedlings (through standard breeding techniques), targeted fertilization, and competition control have resulted in significant increases in managed pine forest productivity (Fox, T.R., E.J. Jokela and H.L. Allen. 2007. The development of pine plantation silviculture in the southern United States. J. Forestry 105:337-347) • Forest Inventory Program: The Forest Inventory and Analysis (FIA) Program of the U.S. Forest Service provides the information needed to assess America's forests. <ul style="list-style-type: none"> ○ According to 2014 USFS report (FS 1035), growth exceeds removals in southern forests (U.S. Forest Resource Facts and Historical Trends) • Provision of biomass market inherently provides capabilities for forest landowners to conduct additional stand treatments therefore improving fiber production. • Historic and projected G/D of catchment. • Regional monitoring provides information that covers secondary and tertiary suppliers.
Means of Verification	<p><u>Lead Verifier</u></p> <p>Public agencies are funded through legislation to measure, analyze, and publicly report trends and data concerning these elements. Forest inventory data and growth data are publicly available to for all stakeholders to analyze.</p> <ul style="list-style-type: none"> • Preamble citations including Worldwide Governance Indicators • FIA Data and Timber Production Output Reports, USDA, State Forest Fact Sheets Southern Forest Future Project, • Mississippi Institute for Forest Inventory Reports • USFS studies • Drax Analysis/consultancy reports • State Forests Fact Sheets (Ex. Mississippi) • F&W BMP Compliance Report • F2M's Historical Perspective on the Relationship between Demand and Forest Productivity in the US South
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	Indicator
2.3.2	Adequate training is provided for all personnel, including employees and contractors (CPET S6d).
Finding	<ul style="list-style-type: none"> • DBI has written procedures in the BSP chain of custody manual that explicitly requires periodic training. Training for all relevant staff is planned and delivered as required. • The VP Sustainability has overall responsibility for FSC/PEFC/SFI training, with VP Sustainability, Site Managers, and Heads of Teams delivering training as appropriate. • The Fiber Purchase Agreement requires all suppliers to provide training to their staff. The Agreement states in Section 9 • The FSC, SFI, PEFC, and ATFS standards all require periodic training for an organization to remain Forest Management and/or Chain of Custody certified. SFI also requires logger training. State-level SFI committees, including those in Alabama, Arkansas/Oklahoma, Louisiana, Mississippi, and Texas, offer logger training on an annual basis. • External audit, internal audit and monitoring processes, • For secondary and tertiary feedstocks, Federal and State laws, and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks.
Means of Verification	<p><u>Lead Verifier</u> Credentiaing and training programs exist for all professionals in the supply chain by jurisdiction and/or by employer.</p> <ul style="list-style-type: none"> • Forest Management and Procurement Standards (FSC, SFI, PEFC, and ATFS) • <u>Logger Training Report</u> • State and Professional Credential Boards (i.e. Foresters-RFs by State and SAF CFs, Logger-State Level, etc) • <u>Drax Investment in Employees</u> • CoC Manual • Op Control Procedure • Internal and external sustainability audits • DBI Document Management System • Fiber Purchase Agreement
Evidence Reviewed	<ul style="list-style-type: none"> • 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>
Comment or Mitigation Measure	None

	Indicator
2.3.3	Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.
Finding	<ul style="list-style-type: none"> • DBI plants were built in areas with abundant forest resources that had lost markets or resided in waning/spot markets. Talented and knowledgeable employees resided in these areas and are now being utilized. • State and local economic incentives granted to attract investment and jobs. • Employees at DBI come from a <70-mile radius. • Provision of biomass market inherently provides capabilities for forests landowner’s additional stand treatments therefore improving fiber production. • MSU and similar institutions in the procurement region keep score of the positive economic impact the forest industry (including secondary and tertiary suppliers) has on the state.
Means of Verification	<p><u>Lead Verifier</u> Location of pellet plants and infrastructure improves local economies, provides exponential effects and contributes to employment.</p> <ul style="list-style-type: none"> • LaSalle Parish, LA Economic Profile • Amite County, MS Forestry Economic Impact Profile • Morehouse Parish, LA Economic Profiles • Pellet Plants Spur New Life in Rural South, 2015 World Biomass • Wood Pellet Co-Firing for Electric Generation Source of Income for Forest Based Low Income Communities in Alabama • http://www.draxbiomass.com/wood-pellets-revitalizing-community/ • Forest landowner associations support of biomass • An assessment of nonindustrial private forest landowner willingness to harvest woody biomass in support of bioenergy production in Mississippi: A contingent rating approach. Steven R. Gruchya, Donald L. Grebnerb, Ian A. Munnb, Omkar Joshib, Anwar Hussainc • Decline in pulp and paper. Effects on backward linked forest industries and local economies. Forest Product Journal, USDA • Supportive company strategies: Drax Community Involvement • Economic Development Incentive programs, PPT • Consultancy • HR Data • http://msucares.com/forestry/economics/important.html
Evidence Reviewed	<ul style="list-style-type: none"> • 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>
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • Southern Forests Future Project states: <i>No single dominant force of change will affect the forests of the South. Rather, a combination of socioeconomic and biophysical factors will reshape the forests of the South and their interaction may well amplify the direct effects. Forest futures will most strongly depend on combinations and interactions of the effects of four key factors: population growth, climate change, fiber markets, and invasive insect, disease, and plant species.</i> • By providing a market for fiber, DBI assists in the development of a robust and resilient forest base. Thinnings assist in developing ground flora and forest structure, including helping in providing better hunting and recreation; utilizing mill residuals is assistive in encouraging sawlog production. Additional returns to landowners from the biomass market allow further investment in robust forests. • DBI’s “Rapid Risk Assessment” process gives information for this aspect. • Monitoring of primary feedstock tracts, and regular review of secondary feedstock supplier performance. • Several federal programs provide incentives for conservation of forestlands and maintaining sustainable forest management practices. Summarized in table 11.1 of the SBP SBR • State programs—It is the States, however, that most directly address provision of ecosystem services. Educational and technical assistance for management of wildlife habitat or riparian areas, water quality, resource conservation, and protection from invasive species generally is available in all States, through their forestry, wildlife, and cooperative extension personnel. Tax abatement programs and credits encourage forest management throughout the supply base. • Each state has a forestry agency, department, or division whose collective responsibilities include providing services and outreach, land management, and forest practices oversight. i.e. Habitat Conservation Plans, Conservation Easements, etc • State Laws and Policies may also include: Forest practices acts, Endangered species acts, Environmental quality act, Wildlife laws, Water quality protection laws, Water resources laws, Land use laws, Cultural protection acts, Business practices laws, Fire practices laws, River compacts and wild and scenic rivers acts, Natural community conservation acts • Privately sponsored programs available in the Southern States include State Tree Farm programs coordinated by the American Forest Foundation (American Tree Farm System Web site 2011) and the Longleaf Restoration Program sponsored by The Longleaf Alliance • BMP Implementation Rates are high in the DBI catchment, leading to improved flood and erosion control. • Logger Training is required of all suppliers via the Fiber Procurement Agreement and SFI certification. • DBI Procurement and Sustainability staff has experienced foresters supported by many forms of credentials. Several states in DBI’s catchment require forester registrations. • External audit, internal audit and monitoring processes for secondary and tertiary feedstocks • Federal and state laws, and regional practices such as good BMP application • The prevalence of SFI FS coupled with DBI’s contractual requirements and regular assessment of supplier performance, provide controls for these feedstocks • The FSC US Controlled Wood Risk Assessment has identified 2 ecosystems that appear within DBI’s catchment – Late Successional Bottomland Hardwoods, and Native Longleaf Pine Systems – that have been designated as “specified risk”. These

	<p>systems are components that in part reflect the overall health and vitality of the overall forest. This designation gives rise to mitigations as stated in 2.1.2 above.</p>
<p>Means of Verification</p>	<p><u>Lead Verifier</u></p> <p><u>Best Management Practices</u> for forestry are established in each jurisdiction and monitored to achieve compliance to the <u>Clean Water Act</u>.</p> <ul style="list-style-type: none"> • <u>Sanctioned logger training programs</u> are present and participated in market wide that educate supply chain about these elements. • Public agencies administer a plethora of programs and enforce conservation laws that protect and support these elements. • <u>The Southern Forest Futures Project, USDA</u> • <u>The Environmental Quality Incentives Program (EQIP), The Forest Land Enhancement Program, Habitat Conservations Plans</u> • State and Professional Credential Boards (i.e. Foresters-RFs by State, SAF CFs, Assoc of Consulting Foresters, Logger-State Level, Wildlife Biologists, etc) • Forestry Commissions &/or Extension Services (i.e. implement local wildfire control) • Forest Management Standards (i.e. ATFS, FSC, SFI, PEFC) • <u>Forestry BMP Implementation Reports</u> • Privately sponsored programs such as the <u>Longleaf Restoration Program sponsored by The Longleaf Alliance</u> • Property Tax Abatement Programs to encourage forest management present in each jurisdiction • Forest practices acts, Endangered species acts, Environmental quality act, Wildlife laws, Water quality protection laws, Water resources laws, Land use laws, Cultural protection acts, Business practices laws, Fire practices laws, River compacts and wild and scenic rivers acts, Natural community conservation acts, etc. • Stakeholder Consultation • Fiber Purchase Agreement • DBI Staff Credentials, Forestry Credential Boards • http://www.mfc.ms.gov/pdf/forest_assessment/ms_assessment_resource_strategy_2010.pdf • <u>State Forest & Wildlife Action Plans</u> • For an example of state level protections and their effectiveness, see: <u>Bioassessment of Silviculture Best Management Practices in Arkansas</u> • The FSC US Controlled Wood Risk Assessment has identified 4 Specified Risks related to ecosystems which occur in the DBI's supply Area – Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems, Central and Southern Appalachian Critical Biodiversity Areas– that have been designated as “specified risk”. These systems are components that in part reflect the overall health and vitality of the overall forest. This designation gives rise to mitigations as stated in 2.1.2 above
<p>Evidence Reviewed</p>	
<p>Risk Rating</p>	<p><input type="checkbox"/> Low Risk <input checked="" type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>
<p>Comment or Mitigation Measure</p>	<p>FSC US has identified, and developed mitigation measures, for four sensitivities which are relevant to secondary and tertiary suppliers - Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems, and the Southern Appalachian Critical Biodiversity Area, Central Appalachian Critical Biodiversity Area.</p> <p>DBI has integrated the FSC HCV maps into its GIS system and screens all suppliers for their intersection with the Specified Risks identified by FSC. Mitigation for primary feedstock includes controls embedded in DBI's internal processes which are subject to monitoring and internal audit. DBI does not have line of sight to individual tracts that provide fiber to secondary and tertiary feedstock suppliers, so other mitigations are</p>

appropriate. The following provides an overview of mitigations chosen for each FSC Specified risk:

Late Successional Bottomland Hardwoods (LSBH)

As DBI primarily sources Southern Yellow Pine, Late Successional Bottomland Hardwoods are mainly an issue for residual suppliers who use hardwoods and are proximate to LSBH areas. The areas that potentially have LSBH have been mapped by FSC and integrated into DBI's GIS system and RRA procedures. For residual suppliers, outreach and education will be the choice mitigation tool. For primary suppliers, information is collected on forest type and species is collected for all harvests. If a forest tract is identified as having a high hardwood component the site will be evaluated to determine if it is a LSBH tract. No fiber will be sourced from harvests that endanger the health, vigour, and long-term persistence of these bottomland hardwood tracts. In addition, educational materials will be provided which will attempt to engage landowners, foresters, and loggers in conservation of this forest system.

Native Longleaf Pine Systems (NLPS)

For NLPS, the areas at risk have been identified by FSC at county/parish level. These areas have been included in the GIS system and RRA process. For primary suppliers, information is collected on forest type and species. If longleaf pine is present on the tract DBI will evaluate the tract and determine the regeneration plans for the site. Educational materials will be provided. If conversion of a LSBH is suspected fiber will not be sourced from the tract. Education and outreach will be the primary mitigation for residual suppliers who's sourcing are intersects FSC identified risk areas. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of Native Longleaf Pine systems.

Southern and Central Appalachian Critical Biodiversity Area (CACBA & SACBA respectively)

Both the Central and Southern Appalachian Critical Biodiversity Areas will only affect DBI's residual sourcing due to the distance from existing pellet mills. Education and outreach will be the mitigation tool employed. As described for the risks above, these materials will be developed according to best available science and be adapted as new information and approaches come available (i.e. through FSC CW Regional meetings). This educational material will be aimed at increasing awareness of the sensitivities and unique nature of these CBAs in hopes of increasing conservation of these highly biodiverse areas.

Other Relevant Internal Procedures:

DBI utilizes Failure Mode Effects Analysis (FMEA) to develop a risk profile of secondary suppliers. Location of sourcing area in reference to known HCVs, mill sourcing profile (species mixed used), and certification status are a few key criteria that influence risk rank and direct level of engagement and internal audit.

DBI's Sustainability and Procurement team conduct supplier reviews every six months to discuss the results of FMEA analysis and information gained through **Residual Supplier Questionnaires** (formal guided check-ins performed at a minimum annually). Analysis of the existing matrix of SFI FS certified mills and suppliers is also reviewed. Currently DBI's supply base is over 90% covered by the reach of other SFI certified mills, significantly reducing the risk of sourcing non-compliant material. DBI is active in SFI State Implementation Committees (SICs) and actively shares and acts on information relevant to sustaining a high level of sustainability compliance in the supply basin. DBI also communicates findings and trends gained through SIC participation and internal audit of primary suppliers directly with mills from which residuals are sourced.

	<p>If it is determined that the risk of negative impact to the HCV cannot be effectively mitigated through information flow and internal controls DBI can choose not to accept material from a region or a supplier.</p> <p><i>DBI's existing programmatic procedures combined with the mitigations described above are sufficient to bring the risk of non-compliance with this requirement to "low".</i></p>
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	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	<ul style="list-style-type: none"> • Market provision for biomass provides a reduction in forest fire risk and in return reduced uncontrolled wildfires occur & prescribed burns needed to reduce fuel load. • Market for biomass can provide a market for diseased and damaged wood (in compliance with all USDA-APHIS quarantine protocol). <ul style="list-style-type: none"> ○ There is a current outbreak of the southern pine beetle in DBI's sourcing area. DBI has met with USFS personnel to discuss harvest of diseased material and suppliers are actively assisting with suppression activities both on USFS and adjacent private lands. • Enforcement actions in each state DBI sources from demonstrates effective application of law to protect species and ecosystems of concern. • Burn permits or licenced prescribed fire licensing is required in all states DBI procures biomass. • Smoke management guidelines provided by forestry commissions. • <u>Interagency Fire Prevention Strategy</u>: This strategy follows on the successes guided by the 2000 Southern Wildfire Prevention Strategy that focused on debris burning and homeowner safety in the wildland urban interface. • NRCS IMP: Forest management standard and assistance to implement integrated pest management plan into land management objectives. • Each state has a forestry agency, department, or division whose collective responsibilities include providing services and outreach, land management, and forest practices oversight. These were reviewed for the States listed above as well as their employment and environmental/natural resources departments. • State Laws and Policies may also include: Forest practices acts, Endangered species acts, Environmental quality act, Wildlife laws, Water quality protection laws, Water resources laws, Land use laws, Cultural protection acts, Business practices laws, Fire practices laws, River compacts and wild and scenic rivers acts, Natural communities conservation acts • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws, extension services, contributions from Universities and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks • Plant pest quarantine programs and USDA-Animal and Plant Health Inspection Service (APHIS) monitor and enforce regulations pertaining to invasive species which have the potential to significantly impact forests and agricultural crops (i.e. emerald ash borer). • USFS conducts aerial surveys to monitors forest pest and disease outbreaks on National Forest and adjacent lands. • State forestry agencies assists timber owners in forest pest management by conducting forest pest surveys and evaluations.

	<ul style="list-style-type: none"> • State Forest Action Plans and Assessments include review of current threats related to invasive species (i.e. Mississippi’s Assessment of Forest Resources and Forest Resource Strategy). • DBI Foresters are active on all State Forestry Associations and SICs, which provide a forum for critical information transfer from federal and state forestry agencies related to current forest health issues (pest/invasive outbreaks & fire).
Means of Verification	<p><u>Lead Verifier</u>. Well governed public agencies and programs exist to support landowners in the management of these elements.</p> <ul style="list-style-type: none"> • Regulations, agencies, programs and enforcement usually administered by a state forestry commission or agriculture dept. Most governed by a state forester. • See 2.2.8 Chemical Applicator & BMP Info • State jurisdiction burn permits and smoke guidelines • <u>State Forest & Wildlife Action Plans</u> • <u>Interagency Fire Prevention Strategy, 2000 Southern Wildfire Prevention Strategy</u> • <u>State of America’s Forest Report, SAF</u> • <u>Southern Forest Futures Report, USDA</u> • Market provision for biomass provides a reduction in forest fire risk and in return reduced uncontrolled wildfires occur & prescribed burns needed to reduce fuel load • <u>Protected areas of the US map & set-aside of key ecosystems and habitats</u> • <u>FIA Forest Inventories</u> • <u>NRCS Integrated Pest Management program</u> • <u>State Forest Fact Sheets</u> • Drax Company Policies • <u>Burn Permits (in all states)</u> • <u>Interagency Fire Prevention Strategy</u> • Internal and external sustainability audits • Consultant Reports • Fiber Purchase Agreement language specific to preventing the spread of emerald ash borer
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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>The FSC US Controlled Wood Risk assessment identifies that there is generally a low risk of illegal harvesting.</p> <p>Enforcement actions in each state sourced from demonstrates effective application of law to protect landowners from illegal logging, unpermitted mining and encroachment. Occurrences of timber theft and encroachment are not systemic in the states from which</p>

	<p>DBI sources. Pathways for recourse exists in each state to remedy the problem. Also see 1.3.1</p> <ul style="list-style-type: none"> • Review of Federal Laws about Timber Theft bans commerce in all illegally sourced forest products whether harvested overseas or within the United States. • All states from which DBI sources fiber has timber theft laws that carry civil and criminal penalties. • Drax Sustainability Policy states "Our policy is designed to ensure that we can verify that the biomass consumed in our generation facilities has been legally produced and is environmentally sustainable. We will comply, as a minimum, with the sustainability requirements being introduced by the UK Government." - See more at: http://www.drax.com/biomass/sustainability-policy/#sthash.nfaO36gM.dpuf • DBI's Commitment to Sustainable Forestry states "DBI's Sustainable Forestry Policy is to promote the Principles of Sustainable Forest Management including: ...complying with legal requirements...", "DBI is committed to comply with applicable federal, state and local laws and regulations..." & "DBI is committed to implement its best efforts to avoid trading and sourcing wood from the following categories: a) Illegally harvested wood" • DDS, and the FSC CW National Risk Assessment find legality to be of "Low Risk" in DBI's procurement regions. See http://www.globalforestryregistry.org/map for additional evidence. • In the EU, the organization that places material/products on the EU market "for the first time" must apply a DDS, and other supply chain actors need to maintain records so that the original supplier can be identified. • The DBI Fiber Purchase Agreement requires legal compliance, and its ongoing supplier monitoring system ensure that illegal logging is of negligible impact to the company. • The FSC Global Forest Registry indicated there was a low risk associated with illegal logging in the United States. • AHEC Report on Timber Trespass • State SICs regularly review and investigate complaints received via their inconsistent practices procedure. • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks • DBI conducted a comprehensive stakeholder consultation to capture feedback about legality issues in the procurement regions. <ul style="list-style-type: none"> ○ One stakeholder voiced their concern about the level of law enforcement and the effectiveness of existing legal controls as they relate to logging. However, DBI continues to support FSC assessment of "low-risk" and through continued monitoring of their catchment finds that the level of enforcement is effective, and that timber trespass is not systemic in procurement region
<p>Means of Verification</p>	<p><u>Lead Verifier</u> Each jurisdiction has its very own version of legislation with well governed agencies enforce these elements that carry civil and criminal penalties.</p>

	Texas	Mississippi	Louisiana	Arkansas	Alabama	Tennessee	Oklahoma	Federal
	State Timber Theft Law	State Timber Theft Law	State Timber Theft Law	State Timber Theft Law	State Timber Theft Law	State Timber Theft Law	Forestry Code	US: Lacey Act
	Publication explaining timber theft law.	Annual report presenting enforcement action stats	Timber theft cases & litigation disclosure via search engine.	Annual reports presenting enforcement action stats.	2011 enforcement report	Extension Fact Sheet	No reports returned by web crawler	Enforcement Action: Article summarizing recent cases.
	Enforcement action example.	Article presenting enforcement action stats for past two years.			Changes to AL forestry enforcement	State v. Lewis Timber Theft Case	No reports returned by web crawler	Third party review of effectiveness of laws: Environmental Investigation Agency
	<ul style="list-style-type: none"> Field inspections and regular assessment of supplier performance Mining - each jurisdiction has its very own version of legislation governing mining, but the federal gov't has oversight. U.S. Code: Title 30 - MINERAL LANDS AND MINING Annual reports presenting mine permitting and oversight inspections. Encroachment Each jurisdiction has its very own version of legislation governing land encroachment. Company CWRA and DDS Transactional Records (Severance Tax) Internal and external sustainability audits Operational Control Procedure State Wildlife and Forestry Action Plans Company policies Fiber Purchase Agreement Also see 1.3.1 Citations. Each jurisdiction has its own version of legislation governing mining but the federal gov't has oversight. U.S. Code: Title 30 - MINERAL LANDS AND MINING Each jurisdiction has its own version of legislation governing land encroachment. Logger Training Report A Nationwide Survey of Timber Trespass Legislation. Hicks, Timothy. Master of Forestry Thesis March 2005 PSU School of Forest Resources Assessment of Lawful Harvesting & Sustainability of US Hardwood Exports, AHEC Illegal Logging Portal Environmental Investigation Agency: The website's only references to the United States are about U.S.-based companies operating in other countries and regarding the Lacey Act. "Illegal" Logging and Global Wood Markets, Seneca Creek Association & WRI State Forestry Laws. Defenders of Wildlife, October 2000: This publication provides a listing of all applicable State laws for forestry within each State. SFI State Implementation Committees Inconsistent Practices Policies, Example Preamble citations including Worldwide Governance Indicators 							
Evidence Reviewed	<ul style="list-style-type: none"> 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							

Comment or Mitigation Measure	None
-------------------------------	------

	Indicator
2.5.1	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).
Finding	<ul style="list-style-type: none"> • The FSC US Controlled Wood Risk assessment reaches a “low risk” determination for these aspects. It reviews them in detail in sections 1.13, 1.14 and 2.3 • Strong support mechanisms via public/private partnerships and protection provided by strong legislation are in place to uphold the rights of identified indigenous people, minorities and local communities. • Preamble citations including Worldwide Governance Indicators • State of America’s Forest, SAF Figure 4 & 13 displaying distribution of landownership showing stable patterns between public and private ownerships. • Today, federal, state, and local governments regulate growth and development through statutory law. The majority of controls on land, however, stem from the actions of private developers and individuals. • Two major federal laws have been passed in the last half century that limit the use of land significantly. These are the National Historic Preservation Act of 1966 (today embodied in 16 U.S.C. 461 et seq.) and the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.). • The legal system in the United States is generally considered fair and efficient in resolving conflicts pertaining to traditional rights including use rights, cultural interests or traditional cultural identity. There are different mechanisms or processes that allow Native American tribes, as well as any private citizen, to deal with disagreement and conflict related to decisions affecting natural resources, and forests that are considered to be equitable. Note the list of Federal Acts in the SBP SBR and the DDS • Title Issues and Ownership Disputes prevalent in minority communities: In partnership with USDA’s Natural Resources Conservation Service and Forest Service, the U.S. Endowment for Forestry and Communities recently launched an initiative to increase profitability and asset value of African American-owned forestland in order to help stem the tragic history of Black land loss. • US support of UN Indigenous Peoples initiative • Stakeholder consultation process revealed no concerns expected to affect feedstock sourcing • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI’s contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks
Means of Verification	<p><u>Lead Verifier</u> Each jurisdiction has statutory law that governs these elements. Ample case law is present demonstrating path of recourse exists for all parties. Each jurisdiction with well governed agencies enforce these elements that carry civil and criminal penalties and administer land use monitoring programs.</p> <ul style="list-style-type: none"> • State of the Forest, SAF • Determination of “low Risk” in FSC National CWRA.

	<ul style="list-style-type: none"> Stakeholder Consultation <u>Major Uses of Land in the US, 2007, Economic Research Service</u> <u>Forestry and African American Land Retention, US Endowment for Forestry and Communities.</u> <u>Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples</u> <u>State of America's Forest, SAF</u> <u>National Historic Preservation Act of 1966</u> (today embodied in 16 U.S.C. 461 et seq.) <u>National Environmental Policy Act of 1969</u> (42 U.S.C. 4321 et seq.) Economic Research Service Reports, <u>Example</u>
Evidence Reviewed	<ul style="list-style-type: none"> 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
Comment or Mitigation Measure	Stakeholders have commented that there are unresolved disputes in some wetland areas. These are not expected to impinge on sourcing feedstocks.

	Indicator
2.5.2	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.
Finding	<ul style="list-style-type: none"> No food related feedstock used. No sustenance living on large scale in US. Irrigation is not used for forestry operations in region due to abundant water resources. No land use change on landscape level since 1950s No adverse commentary during stakeholder consultation process. External audit, internal audit and monitoring processes. For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks
Means of Verification	<u>Lead Verifier</u> <ul style="list-style-type: none"> Subsistence living levels in limited or regionalized cases supported by well governed public agencies. Abundant water resources in procurement region not limiting factor for tree growth and feedstock not utilized as food stuff. Landscape land use levels monitored Stakeholder Consultation <u>Dept. of Interior, Federal Subsistence Management Program</u> <u>Average annual rainfall by state</u> <u>FIA data and supplemental reports and analysis</u> <u>State of America's Forest, SAF</u> <u>ERS Report</u>
Evidence Reviewed	<ul style="list-style-type: none"> 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

Comment or Mitigation Measure	None
-------------------------------	------

Indicator	
2.6.1	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.
Finding	<ul style="list-style-type: none"> The Employment Standards Administration of the US Department of Labor implements and enforces US labor law. The Fair Labor Standards Act (FLSA) establishes minimum wage, overtime pay, recordkeeping, and child labor standards affecting full-time and part-time workers in the private sector and in federal, state, and local governments. Two major federal laws have been passed in the last half century that limit the use of land significantly. These are the National Historic Preservation Act of 1966 (today embodied in 16 U.S.C. 461 et seq.) and the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.). 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, lath mill, shingle mill, or cooperage stock mill abide by (Order 4). [75 FR 28453, May 20, 2010] OSHA eTool: This eTool outlines the required and recommended work practices that may reduce logging hazards. 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. OSHA eTool 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.” OSHA and NIOSH annual logging statistics provide an indicator of level of compliance. No adverse commentary during stakeholder consultation process. External audit, internal audit and monitoring processes. For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI’s contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks
Means of Verification	<p><u>Lead Verifier</u> Statutory law and regulations exist and persist with the enforcement of employment, labor, health & safety law. Related management systems, internal processes and company policies are reviewed as part of third party external audits.</p> <ul style="list-style-type: none"> WGI indicates effective enforcement of laws in US DBI has written contractual requirements requiring compliance. Employment Law Poster Stakeholder Consultation process <u>Employment & Labor Law</u>

	<ul style="list-style-type: none"> • National Historic Preservation Act of 1966 (today embodied in 16 U.S.C. 461 et seq.) • National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) • OSHA Forest Industry Regulations • AHEC Legality Report • ERS Report • The National Labor Relations Act • Survey of violations of trade union rights by the International Trade Union Congress ITUC • Ratification of ILO conventions and their monitoring of non-compliance by the ILO, see the ILO NORMLEX database. • SFI State Implementation Committee Inconsistent Practices Policies • OSHA & NIOSH Annual Logging Statistics • Supporting Company Policies: Drax Health & Safety Policy
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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>All employees in the US are allowed to unionize and gather for collective bargaining. Unions exist across the US and have for quite some time signifying their ability to operate lawfully.</p> <ul style="list-style-type: none"> • The National Labor Relations Act protects workers' right not only to form and join labor organizations and bargain collectively, but also "to engage in other concerted activities for the purpose of collective bargaining or mutual aid or protection." The United States Supreme Court has deemed strikes to be among the concerted activities protected. • ITUC & IOE: The US and some employers have direct complaints cited but none are related to forestry or the forest industry. • Know Your Vendor is conducted to ensure a supplier has not been in violation of the law. • No adverse commentary during stakeholder consultation process. • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks
Means of Verification	<p><u>Lead Verifier</u></p> <ul style="list-style-type: none"> • Statutory labor & employment laws and regulations are protective of employees' rights, health and safety. • WGI indicates effective enforcement of laws in US • Risk management of business operations inherently drives compliance.

	<ul style="list-style-type: none"> • Related management systems, internal processes and company policies are reviewed as part of third party external audits. • <u>Equal Opportunity Employment Act</u> • The National Labor Relations Act • Employment Law Poster • PEFC-GD-2001-2014 CoC H&S Req Review Email, A survey of violations of trade union rights by the International Trade Union Congress ITUC at http://survey.ituc-csi.org/ • Federal laws listing review • Operation Control Procedure (KYV)
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	Indicator
2.7.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using any form of compulsory labour.
Finding	<p>Sufficient laws and consequences exist in the US to deter forced labor from occurring.</p> <ul style="list-style-type: none"> • According to the 2010 U.S. Department of Labor's List of Goods Produced by Child or Forced Labor, forced labor has been identified in the harvesting and production of timber in Brazil, Peru, and Myanmar (Burma). • 18 U.S. Code § 1589 - Forced labor: Whoever knowingly provides or obtain labor by force in the US is subject to be fined under this title, imprisoned not more than 20 years, or both. • KYV process reviews suppliers to ensure no violations of the sort are on record. • No adverse commentary during stakeholder consultation process. • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks
Means of Verification	<p><u>Lead Verifier</u></p> <ul style="list-style-type: none"> • Statutory labor & employment laws and regulations are protective of employees' rights, health and safety. • WGI indicates effective enforcement of laws in US • DBI has written contracts requiring compliance with legislation. • Risk management of business operations inherently drives compliance. Related management systems, internal processes and company policies are reviewed as part of third party external audits. • <u>18 U.S. Code § 1589 - Forced labor</u> • Internal and external sustainability audits • PEFC Guidance Review • Operational Control Procedure (KYV)

Evidence Reviewed	<ul style="list-style-type: none"> 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
Comment or Mitigation Measure	None

	Indicator
2.7.3	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is not supplied using child labour.
Finding	<p>Strong and effective legislative controls are in place for this aspect in the wood procurement catchment.</p> <ul style="list-style-type: none"> The Fair Labor Standards Act (FLSA) sets wage, hours worked, and safety requirements for minors (individuals under age 18) working in jobs covered by the statute. The rules vary depending upon the particular age of the minor and the particular job involved. As a general rule, the FLSA sets 14 years of age as the minimum age for employment and limits the number of hours worked by minors under the age of 16. FLSA generally prohibits the employment of a minor in work declared hazardous by the Secretary of Labor (for example, work involving excavation, driving, and the operation of many types of power-driven equipment). The FLSA contains several requirements that apply only to particular types of jobs (for example, agricultural work or the operation of motor vehicles) and many exceptions to the general rules (for example, work by a minor for his or her parents). Each state also has its own laws relating to employment, including the employment of minors. If state law and the FLSA overlap, the law which is more protective of the minor will apply. <i>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 and PEFC a) not complying with local, national or international legislation. No evidence of child labor or violation of ILO fundamental principles on a remarkable scale is known to occur. Global Child labor trends 2000 to 2004. ILO (International Labour Office). http://www.ilo.org/ipecinfo/product/viewProduct.do?productId=2299. Note that the United States is a member of the ILO but has not yet ratified the ILO Declaration on Fundamental Principles and Rights at Work.</i> <u>The FSC US Controlled Wood Risk Assessment (sections 1.12 and 2.2) has found that there is low risk in connection with child labor.</u> No adverse commentary during stakeholder consultation process. External audit, internal audit and monitoring processes. <p>For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks</p>
Means of Verification	<p><u>Lead Verifier</u> Statutory labor & employment laws and regulations are protective of employees' rights, health and safety.</p> <ul style="list-style-type: none"> WGI indicates effective enforcement of laws in US DBI has written contracts requiring compliance with legislation.

	<ul style="list-style-type: none"> • Risk management of business operations inherently drives compliance. Related management systems, internal processes and company policies are reviewed as part of third party external audits. • Employment Law Poster • Internal and external audits including field inspections • Op Control Procedure (KYV) • <u>Stakeholder Consultation</u> • <u>Federal Labor Laws</u> • <u>Company CWRA and DDS</u>
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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>Strong and effective legislation exists to prevent discrimination.</p> <ul style="list-style-type: none"> • The Age Discrimination in Employment Act (ADEA): prohibits employers from discriminating on the basis of age. • Title VII of the Civil Rights Act of 1964: prohibits discrimination based on race, color, religion, sex or national origin • The Pregnancy Discrimination Act: specifying that unlawful sex discrimination includes discrimination based on pregnancy, childbirth, and related medical conditions • The Family and Medical Leave Act: sets requirements governing leave for pregnancy and pregnancy-related conditions • The Rehabilitation Act of 1973: prohibits employment discrimination on the basis of disability • The Bankruptcy Reform Act of 1978: prohibits employment discrimination on the basis of bankruptcy or bad debts. • The Immigration Reform and Control Act of 1986: prohibits employers with more than three employees from discriminating against anyone (except an unauthorized immigrant) on the basis of national origin or citizenship status. • The Americans with Disabilities Act of 1990 (ADA): enacted to eliminate discriminatory barriers against qualified individuals with disabilities, individuals with a record of a disability, or individuals who are regarded as having a disability. • The Age Discrimination in Employment Act of 1967 (ADEA): This law protects people who are 40 or older from discrimination because of age. • Note that AR, LA, MS, and TX do not have anti-discrimination laws in place. • DBI employee handbook has EEO policies in place: EEO and Non-discrimination Statement, Anti-harassment Guidelines, Reasonable Accommodation • PEFC DDS system reviewed the ILO: Even through the US has not ratified all the ILO conventions due to sovereignty concerns, US employers and laws comply with indicators and rule of law enforces. The US has not ratified all the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.

	<ul style="list-style-type: none"> • <u>The FSC US Controlled Wood Risk Assessment (sections 1.12 and 2.2) has found that there is low risk in connection with discrimination.</u> • No adverse commentary during stakeholder consultation process. • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI’s contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks
Means of Verification	<p><u>Lead Verifier</u> Statutory labor & employment laws and regulations are protective of employees' rights, health and safety.</p> <ul style="list-style-type: none"> • WGI indicates effective enforcement of laws in US • DBI has written contracts requiring compliance with legislation. • Risk management of business operations inherently drives compliance. Related management systems, internal processes and company policies are reviewed as part of third party external audits. • Employment Law Poster • Internal and external audits including field inspections • DBI’s DDS • HR materials • Federal Laws applicable to Labor • DBI employee handbook has EEO policies in place • PEFC Draft Guidance Review: On the ratification of ILO conventions and their monitoring of non-compliance by the ILO, see the ILO NORMLEX database at http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:1:0 • The US has not ratified all the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • The Fair Labor Standards Act (FLSA) sets wage, hours worked, and safety requirements for minors (individuals under age 18) working in jobs covered by the statute. The rules vary depending upon the particular age of the minor and the particular job involved. As a general rule, the FLSA sets 14 years of age as the minimum age for employment and limits the number of hours worked by minors under the age of 16. FLSA generally prohibits the employment of a minor in work declared hazardous by the Secretary of Labor (for example, work involving excavation, driving, and the operation of many types of power-driven equipment). The FLSA contains several requirements that apply only to particular types of jobs (for example, agricultural work or the operation of motor vehicles) and many exceptions to the

	<p>general rules (for example, work by a minor for his or her parents). Each state also has its own laws relating to employment, including the employment of minors. If state law and the FLSA overlap, the law which is more protective of the minor will apply.</p> <ul style="list-style-type: none"> • The Equal Pay Act amended the Fair Labor Standards Act in 1963. The Equal Pay Act prohibits employers and unions from paying different wages based on sex. • Fiber Purchase Agreement: Signatories must abide by all laws or be in breach. • ITUC & IOE: The US and some employers have direct complaints cited but none are related to forestry or the forest industry • The US has not ratified all the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles. • No adverse commentary during stakeholder consultation process. • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks
<p>Means of Verification</p>	<p><u>Lead Verifier</u> Statutory labor & employment laws and regulations are protective of employees' rights, health and safety.</p> <ul style="list-style-type: none"> • WGI indicates effective enforcement of laws in US • DBI has written contracts requiring compliance with legislation. • Risk management of business operations inherently drives compliance. Related management systems, internal processes and company policies are reviewed as part of third party external audits. • Employment Law Poster DBI's DDS • Fiber Purchase Agreement • Internal and external audits including field inspections • Stakeholder Consultation • <u>PEFC-GD-2001-2014 CoC H&S Req Review Email</u>. A survey of violations of trade union rights by the International Trade Union Congress ITUC at https://survey.ituc-csi.org/ • The US has not ratified all the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.
<p>Evidence Reviewed</p>	<ul style="list-style-type: none"> • All means of verification reviewed
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Specified Risk <input type="checkbox"/> Unspecified Risk at RA</p>
<p>Comment or Mitigation Measure</p>	<p>None</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	<ul style="list-style-type: none"> • The United States has in place Federal legislation regulating employers' responsibilities for worker health and safety – Occupational Safety & Health Act (OSHA) of 1970. Within this Act there are logging-specific regulations: OSHA 1910.266 • <u>OSHA eTool</u>: This eTool outlines the required and recommended work practices that may reduce logging hazards. 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 for worker rights. • In addition, each of the States that DBI operates in have additional departments, legislation, and regulation regarding worker safety and health: Louisiana Workforce Commission, Texas Workforce Commission (TWC), AL Dept of Labor, MS Dept of Employment Security (defers to OSHA) and the Arkansas Dept of Labor. • Thirty-four states have some type of program initiatives for worker safety and health protection. These programs have a variety of names, including: Accident Prevention Programs, Injury and Illness Prevention Programs, and Comprehensive Safety and Health: states that operate their own state OSHA program have until January 1, 2016 to implement the new requirements. To date, only four states have adopted and put into effect the new federal OSHA reporting requirements. Not all States have met these guidelines but have a process in place. • Fiber Purchase Agreement: Compliance with Laws, Forestry Practices and Safety Rules. Suppliers are signatory. • Ark Pro Logger, Tx Master Logger, MS Pro Logging Mgr and LA Master Logger curriculums promote health and safety of forest workers by providing OSHA training. • Drax Biomass has adopted the Drax Group PLC Safety and Health Policy. The policy indicates that safety and health rules and procedures have been established and enforced. • Drax Biomass has signed the FSC Evaluation of the organization's commitment to FSC values and occupational health and safety in the Chain of Custody FSC-PRO-20-001 V1-0 EN regarding FSC values and occupational health and safety. • Safety training portion of logger training curriculum • The FSC US Controlled Wood Risk Assessment has found that there is a low risk in respect of Health and safety (section 1.11) • No adverse commentary during stakeholder consultation process. • External audit, internal audit and monitoring processes. • For secondary and tertiary feedstocks, Federal and State laws and regional practices such as the prevalence of SFI FS coupled with DBI's contractual requirements and regular assessment of supplier performance, provide sufficient controls for these feedstocks
Means of Verification	<p><u>Lead Verifier</u></p> <ul style="list-style-type: none"> • Laws and regulations exists to establish and govern minimum standards and establish safe conditions for employees. • WGI indicates effective enforcement of laws in US • DBI has written contracts requiring compliance with legislation. • Related management systems, internal processes and company policies are reviewed as part of third party external audits.

	<ul style="list-style-type: none"> • <u>High levels of trained loggers</u> receiving safety training present due to market requirements. • <u>Employment Law & Labor Law Requirements</u> <u>Logger Training Report</u> <u>OSHA 1910.266 & eTOOL</u> • Supporting Company Policies:<u>Drax Health & Safety Policy</u> • <u>Employment Law Poster</u> • Federal Laws applicable to Labour • DBI employee handbook has EEO policies in place • Fiber Purchase Agreement • Internal and external audit • Employee training log • Logger Training Report • Company Policies • FSC low risk determination • State specific labor laws • State specific logger training verification websites : <u>Ex. MS PLM</u>
Evidence Reviewed	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • DBI’s primary feedstock is southern yellow pine (SYP) grown on 25-30 year rotations. This forest type is not considered to be “high carbon stock” therefore risk of sourcing material which will endanger high carbon stock forests is very low. • SBP highlights wetlands and peatlands as sources of high carbon stock that should not be either drained or converted. Wetlands are defined by SBP as “Land that is covered with or saturated by water, permanently or for a significant part of the year”. Peatlands are specific type of wetland ecosystem where continuous soil saturation leads to anaerobic conditions where organic matter is accumulated faster than it can be decomposed. Wetlands with high peat concentration are not that common on the landscape but wetlands with shorter periods of saturation can and do support a component of SYP. However, the risk of sourcing from areas which have been “drained or converted as of January 2008” is negligible due to CWA restrictions. CWA regulation, in place since 1972, allow for no change to the hydrology of wetlands without the permission of the Army Corps of Engineers. This legislation effective halted the conversion of wetlands for forestry and agricultural purposes. Therefore, the risk of sourcing fiber originated from areas which contained high carbon stock wetlands in January of 2008 but no longer support the same wetland system (and associated carbon storage capacity) is negligible.

	<ul style="list-style-type: none"> • DBI's DDS and Rapid Risk Assessment allows for the identification of wetland areas and sensitive sites. Harvest of primary feedstock that occurs on or near wetland areas is assigned higher risk and field checked for compliance. • Implementation of BMP's is a further control to maintain the quality of wetlands. State BMPs designed to meet CWA requirements. Frequent surveys have found that BMP compliance rates are very high (>90%). • DBI knows the location of all tracts from which fiber is received direct from the woods and can verify that material is not originating from old growth/high carbon stock areas. • DBI gathers information from secondary suppliers through Residual Supplier Questionnaires and internal audit. Biannual supplier reviews discuss risk associated with sourcing from HCVs including high carbon stock forests. • Over the past eight years or so, we have seen removals decrease while growing stock increased. This was due to the economic downturn. This data can be accessed using FIA statistics. FIA statistics and TPO reports track the ebbs and flows of forest harvests vs growth capturing influences such as the recent economic downturn.
<p>Means of Verification</p>	<p><u>Lead Verifier</u></p> <ul style="list-style-type: none"> • Records showing use of SYP, including transactions and maps. • Clean Water Act (sec 404) • Preamble citations including Worldwide Governance Indicators • No predominance of high carbon storing soils present in wood procurement basin. • Related management systems, internal processes and company policies are reviewed as part of third party external audits. • <u>Monitoring and high implementation rates of forestry best management practices (BMPs) helps maintain carbon stocks.</u> • <u>National status of state developed and implemented forestry best management practices for protecting water quality in the United States</u> • <u>Southern Group of State Foresters 2012 Implementation of Forestry Best Management Practices Report</u> • Procedures and contractual requirements for implementation of BMP's • High levels of trained loggers are present due to market requirements. • <u>FIA Data and supplemental reports and analysis, TPO Rpts</u> • <u>F2M's Historical Perspective on the Relationship between Demand and Forest Productivity in the US South</u> • <u>Forest Inventory and Analysis National Program</u> • <u>The Southern Forest Futures Project: technical report. Gen. Tech. Rep. SRS-178., Southern Research Station</u> • Fiber Purchase Agreement • Consultancy • <u>State Forest Fact Sheets</u> • Stakeholder Consultation • Company CWRA and DDS • F&W BMP Implementation Report • MS Institute for Forest Inventory • <u>Forest Soils, Charles H. (Hobie) Perry and Michael C. Amacher</u> • <u>State BMP Manuals</u> • <u>Decline in the pulp and paper industry: Effects on backward linked forest industries and local economies, USDA</u> • <u>Market Response Article, Karen Apt, USDA</u>
<p>Evidence Reviewed</p>	<ul style="list-style-type: none"> • 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
Comment or Mitigation Measure	None

	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	<ul style="list-style-type: none"> • Fiber studies carried out prior to construction of the plant, and on-going analysis of forest data, shows that forest inventories will continue to grow after the DBI plants are in full production. There will not be a reduction in planted area due to DBI’s activity, and the forest management activities that are undertaken to supply fiber to the plants will help maintain the vigor and growing habits of the forest. • FIA data shows that forests in the catchment, and elsewhere in the South, have had increasing inventories and have also produced more wood per acre per year over the last 50 years. This is widely acknowledged as being due to forest owners responding to markets. The biomass market is likely to assist in this promoting this response from owners. • Compliance with Best Management Practices ensures that areas with particular carbon sensitivities (streamsides and associated riparian habitats, and older trees) are subject to effective controls – According to F2M, states with robust harvest activity tend to have higher BMP compliance rates (i.e. MS 91%, LA 96%) F2M Blog • Southern Forest Futures reports that: after accounting for harvests, forest growth, land use, and climate change, the total carbon pool represented by the South’s forests is forecasted to increase slightly from 2010 to 2020/2030 and then decline, primarily due to urban encroachment. • A literature review conducted by the National Council of Air and Stream Improvement (1992), as well as studies by Rajja (2003), Johnson (1992), and Johnson and Curtis (2001) found that the “categorical assumption” of soil carbon loss due to harvesting is unwarranted. • The US and the US South has a 60 plus year history of both increasing production of forest products and an increasing forest inventory resulting in increasing carbon stocks (USDA Forest Service). • Over the past eight years or so, we have seen removals decrease while growing stock increased. This was due to the economic downturn. This data can be accessed using FIA statistics.
Means of Verification	<p><u>Lead Verifier</u> Monitoring and high implementation rates of forestry best management practices (BMPs) helps maintain carbon stocks. High levels of trained loggers are present due to market requirements. No predominance of high carbon storing soils present in wood procurement basin. Related management systems, internal</p> <ul style="list-style-type: none"> • In-house fiber studies • Procurement procedures • The Southern Forest Futures Project: technical report. Gen. Tech. Rep. SRS-178., Southern Research Station • Consultancy • F2M BMP Compliance Blog • Drax FIA Study for Plant Placement, PPT • RPA Data • Draft Mill Closure Article, USDA

	<ul style="list-style-type: none"> Market Response Article, Karen Apt, USDA MS Institute for Forest Inventory FIA statistics and TPO reports track the ebbs and flows of the forest harvests vs growth capturing long term trends such as presented in this conclusion. <u>F2M's Historical Perspective on the Relationship between Demand and Forest Productivity in the US South</u>
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
Comment or Mitigation Measure	None

	Indicator
2.10.1	Genetically modified trees are not used.
Finding	<ul style="list-style-type: none"> The Global Forest Registry (www.globalforestregistry.org) indicated that the United States may be considered low risk in relation to wood from genetically modified trees. At the same time, it should be noted that United States is most advanced country in laboratory experiments and field trials of GMO species and thus the possibility that GMO species will be commercially used in US is realistic. If updated data becomes available about commercial usage of GMO species in US, the US FSC Controlled Wood Risk Assessment for this category will be updated and reviewed. DBI's commitment to sustainable forestry states to "avoid trading and sourcing wood from... e) Wood from forests in which genetically modified trees are planted." The FSC US Controlled Wood Risk Assessment has found there is a "low risk" of wood from forests in which genetically modified trees are planted (Section 5.1). No adverse commentary during stakeholder consultation process. External audit, internal audit and monitoring processes. For secondary and tertiary feedstocks these controls and evidence are also suitable for a "low risk" determination.
Means of Verification	<u>Lead Verifier</u> <ul style="list-style-type: none"> FSC Global Forest Registry www.globalforestregistry.org (historic reference) FSC Controlled Wood RA Forestry Department of FAO (Food and Agriculture Organization) working paper "Preliminary review of biotechnology in forestry, including genetic modification", 2004: www.fao.org/docrep/008/ae574e/ae574e00.htm Company CWRA and DDS DBI's Commitment to Sustainable Forestry Forestry Department of FAO (Food and Agriculture Organization) working paper "Preliminary review of biotechnology in forestry, including genetic modification", 2004 <u>Assessment of Lawful Harvesting & Sustainability of US Hardwood Exports, AHEC</u>

Evidence Reviewed	<ul style="list-style-type: none"> 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
Comment or Mitigation Measure	<p>FSC notes that this risk may increase in future. DBI will monitor through direct knowledge of its supply base and engagement with other forest actors, including FSC and SFI.</p>