Sustainable Biomass Program

Supply Base Report: Drax Biomass Inc - LaSalle BioEnergy LLC

www.sbp-cert.org

Completed in accordance with the Supply Base Report Template Version 1.2

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

Contents

1 Overview

Producer name: Drax Biomass Inc. (DBI)
- LaSalle BioEnergy LLC (LBE)

Producer location: DBI Corp: 5 Concourse Parkway NE Suite 3100 Atlanta, GA 30328
- LBE: 4915 Hwy 125 Urania, LA

Geographic position: DBI: 33.916972, -84.354599
- LBE: 31.880751, -92.278342°

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Date report finalised: February 21, 2018

Close of last CB audit: LBE: December 1, 2017

Name of CB: SCS Global Services

Translations from English: No

SBP Standard(s) used: Standards 1,2,4 & 5, version 1, March 2015

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

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**
☒	☐	☐	☐	☐

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 includes southern Arkansas, Louisiana, Mississippi and potentially east Texas and west-central Alabama in the United States. 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. Each plant draws feedstocks direct from the forest within a 70-mile radius, but reserves the ability to procure out to a 100-mile radius in response to market pressures and/or weather events. However, residuals produced by forest product manufactures could be procured from as far away as 200 miles. All statements based on the 100-mile radius for feedstocks direct from the forest are made for precautionary purposes. LBE specifically procures fiber from southern Arkansas, northern Louisiana and potentially from east Texas.

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 from public ownership via a supplier network. Approximately half of the fiber originates from institutionally owned private forests while less than a third is derived from family owned private forests. A gradual increase of residual fiber will become available from forest products manufacturing facilities as demand for solid wood products recovers and new laminated wood products emerge as aligned with housing starts.

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.

No notable changes in the number or type of other wood using industries operating in LBE's catchment has occurred in the last few years. However, the building of LBE and sporadic operation by a previous owner and the recent change in ownership to Drax Biomass will provide a consistent market for those practicing forest management. It is also likely that the underutilized assets in the sawmilling sector will move back into production in the next 12-24 months as aligned with the expected improvement with housing starts. In-woods chipping capacity also remains idle and available in the catchment due to supressed boiler fuel markets related to low fossil fuel costs. Some suppliers and landowners prefer to reasonably capture available fiber by using

in-woods chipping operations to restore forest health, implement aesthetically pleasing harvests and reduce site preparation costs for reforestation.

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 forest area. Some sizeable areas of natural lands are present along the larger rivers. Smaller natural areas are scattered unevenly through the area. 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 forestland surrounding LBE are privately owned by corporate landowners-institutional investors (i.e. REITs & TIMOs). Corporate forest owners, who must produce shareholder returns, generally practice more intensive silviculture and land management than the smaller family forest landowners who typically manage to achieve more diverse objectives. The predictable management regimes of the corporate owners will provide a steady flow of pulpwood for LBE and the surrounding markets. The second largest group of landowners are private landowners with the remainder of acreage owned by the public (i.e. federal and state governments). 30% of the forests are privately owned, with over a third held by "non-institutional private family forest owners". As the average tract size of these holdings is less than 100 acres, timber revenue generally represents just a portion of their total income. Therefore, harvest timing for family forest landowners can be less predictable.

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 forests[1].

Senescence of the US pulp and paper industry has resulted in the closure or curtailment of a couple large pulp mills in or adjacent to the catchment that previously consumed over 1.2 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 has 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 long-term consequences for the structure of the forest.

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

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

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. 76% of the acres surrounding LBE are heavily forested and defined as timberland. 60% 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 who have helped to advance sound forest management practices. Species grown in the region are indigenous to the area, which improves pest and disease resistance and provides habitat for local flora and fauna. Federal and state governments also provide effective oversight to ensure that forest activities comply with relevant laws and regulations, and state Forestry Best Management Practices that minimise environmental harm.

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.

[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/.

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 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:

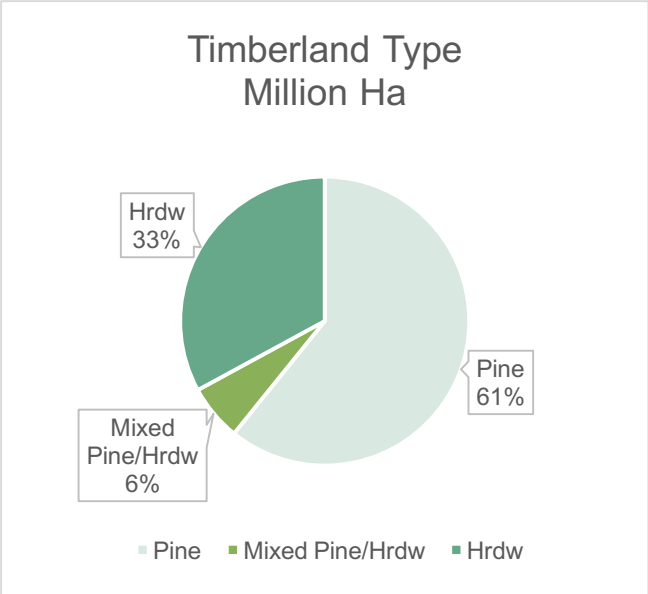
"Strong markets for forest products provide incentives for private landowners to keep their lands in forest cover (Wear 2013). This is particularly important across the longleaf range where recent forecasts of human population and income growth point toward increasing pressure in some locations to convert 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 activities[5]."

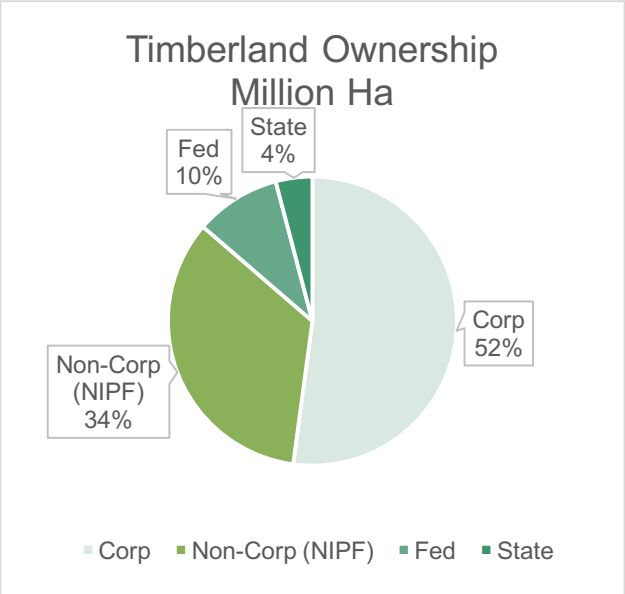
Forestland Descriptions

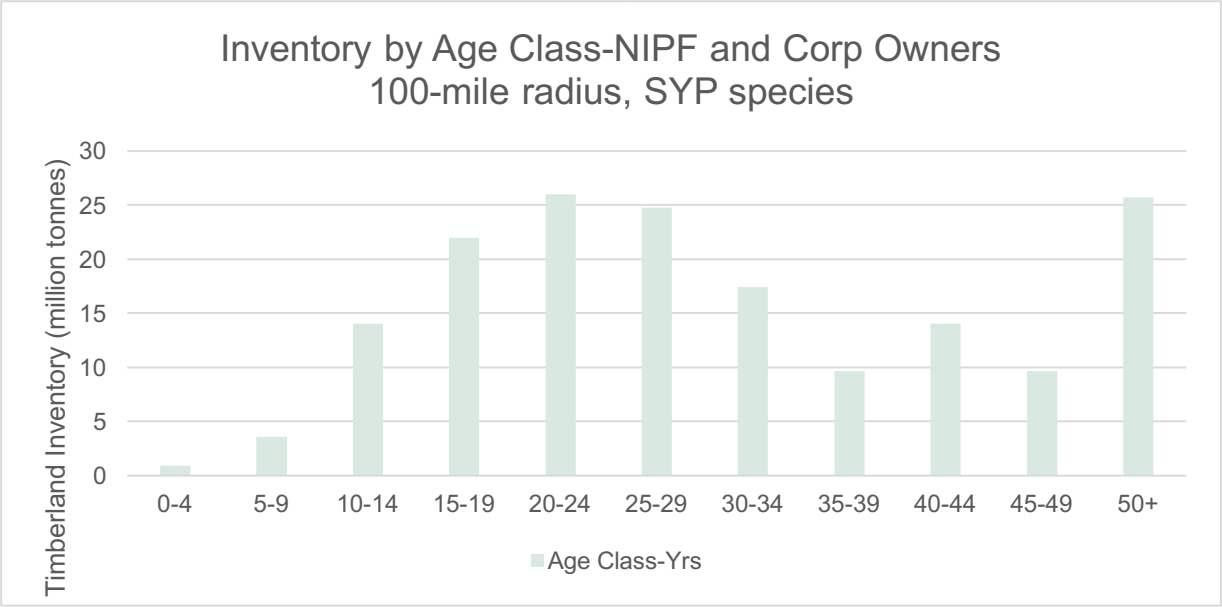
LBE is located near the southern tip of an extensive pine forest situated between the Mississippi River and the Red River's alluvial plains. These rivers act as a natural geographic barrier for LBE's supply basin. Despite the presence of two large watersheds in the area, 60% of the acreage within the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







SBP Feedstock Product Groups & Supplier Make-Up[6]

All Primary and Secondary feedstock used by LBE is SBP Compliant. If Tertiary Feedstock is used, it too will be SBP Compliant[7].

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

[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."

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

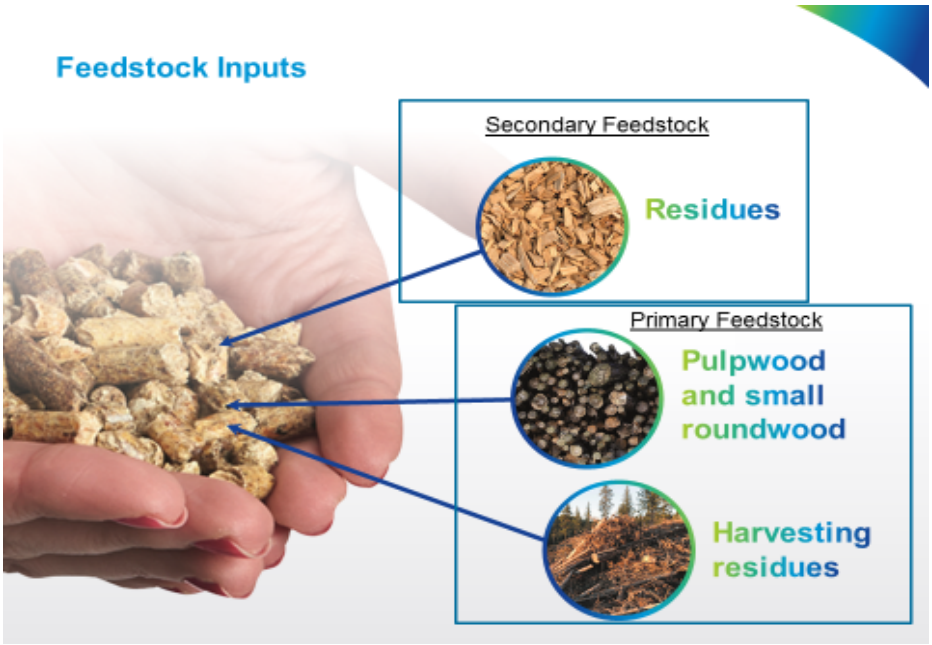
DBI implemented Sustainable Forest Management programs, many of which require participant companies to promote certified forest management amongst feedstock suppliers. This includes extensive reporting and contractually required training, as well as other components that are necessary for the certifications. 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.

2.3 Final harvest sampling programme

The average rotation length for SYP in LBE's catchment is approximately <35 years. 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

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	*de minimis*

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. * PEFC-endorsed forest management schemes: SFI® and American Tree Farm™ are the predominant schemes, with minor areas of 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 20% of feedstock from certified sources.

American Tree Farm System™		*%*
Arkansas	*1,200,856 ac (485,969 ha)*	*6.5*
Louisiana	*1,500,000 ac (607,028 ha)*	*10.3*
Texas	*840,101 ac (339,976 ha)*	*5.9*
Sustainable Forestry Initiative®		*%*
Arkansas	*2,645,041 ac (1,070,410 ha)*	*14.3*
Louisiana	*2,942,400 ac (1,190,747 ha)*	*20.2*
Texas	*2,375,857 ac (961,475 ha)*	*16.6*
Forest Stewardship Council®		*%*
Arkansas	*660,184 ac (267,166 ha)*	*3.6*
Louisiana	*606,885 ac (245,597 ha)*	*4.2*
Texas	*60,224 ac (24,371 ha)*	*0.4*
ATFS™ and SFI® Subtotal*	***11,504,255 (4,655,606 ha)***	***24.3***
Total	***12,831,548 ac (5,192,743 ha)***	***27.1***

Feedstock[8]

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

[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

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

- 20% to 39% 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%*
- 60% to 79% 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 ≤1% of LBE's feedstock. However, if this feedstock type is further utilized it could increase to ~20% 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*

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

k. Volume of secondary feedstock: *c* 20% to 39% residues

l. Volume of tertiary feedstock: *None anticipated*

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
X	☐

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 LBE and an expansion of ABE's supply area, which considered all existing and potential sources of primary and secondary feedstocks (manufacturing residuals), as well as the feedstocks' point of origination. The evaluation covered all pellet mills, and 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 all 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 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. In addition, the growth management and harvesting of SYP is less complex than for other forest types, and typically has fewer environmental sensitivities.

No special mitigation measures were identified beyond diligent procurement practices.

4.4 Results of Supplier Verification Programme

Risk assessment results indicate "low risk" therefore no supplier verification program is required at this time.

4.5 Conclusion

There is “low risk” to all 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. 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, the raw material supply and resulting production of pellets comply with SBP requirements.

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 internal forest ecologist helped collect and collate supporting evidence and analyse external stakeholder responses. Other DBI employees, particularly those on the procurement team and those associated with company systems, also contributed to the SBE. Evidence collected and work performed to achieve and maintain 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 in which initial compliance with SBP indicators were achieved.

The evaluated biomass producers were undergoing commissioning at the time of this evaluation, so there was limited trading and operational experience available to inform some aspects. The forest elements of the evaluation were not materially affected by this, but lack of information regarding commissioned production rates was an inevitable factor in the SBE.

DBI operates a suppler 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 view of the sampling rates and results of those reviews..

6 Stakeholder Consultation

DBI administered the stakeholder consultation starting May 19, 2017 and concluded on July 17, 2017. Notification to all interested parties was posted on DBI's website (www.draxbiomass.com) signalling the launch of the initial stakeholder consultation period and upcoming SBP external audit.

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 relating to the main SBP criteria, and were asked to identify any pertinent issues. Verifiers were presented for each indicator and consultees were asked to rate the evidence used to conclude each as low risk. Consultees were also solicited to provide additional verifiers and to comment on the quality of the verifiers presented for each indicator. DBI received 29 direct responses from 8 participants providing 13 in need of addressing. Many of respondents completed ratings inputs via the scales presented.

The certifying body held a follow-up consultation immediately after conclusion of DBI's consultations. Results of those 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 dialogue[9].

6.1 Response to stakeholder comments

All comments received through the consultation were reviewed by DBI's forest ecologist and sustainability manager. Comments containing verifiers of a challenging or supportive nature, including quotations capturing personal experiences from experts in their respective fields were collected for response.

The comments demonstrated that the consultees had not identified any risks that required further controls or mitigation. Many consultees re-affirmed the effective nature of existing controls in the region and provided supplements to existing verifiers. As such, the responses to DBI supported the Low Risk designation for all indicators. A summary of stakeholder responses is included in Appendix B.

[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 LBE determined that all indicators are Low Risk for all 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 have well-established systems of laws and regulations that satisfy all applicable SBP indicators.

There are no sub-scopes.

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	

Indicator	Initial Risk Rating		
	Specified	Low	Unspecified
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 to Low Risk rating of the risk assessment.

8.2 Site visits

Not applicable.

8.3 Conclusions from the Supplier Verification Programme

Not applicable.

9 Mitigation Measures

9.1 Mitigation measures

No mitigation measures identified.

9.2 Monitoring and outcomes

Not applicable.

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.

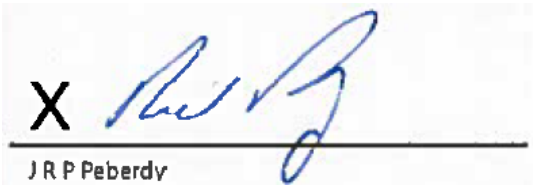
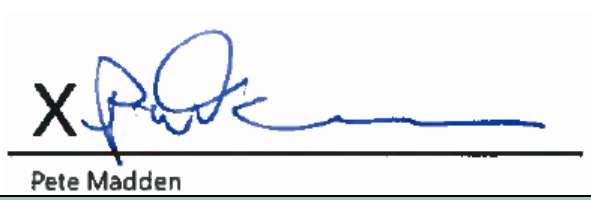
2016/17

- Via Annual Internal Audit: Mike Ferrucci – Interforest

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:	X  J R P Peberdy	***VP, Sustainability***	***February 21, 2018***
	Name	**Title**	**Date**
The undersigned persons confirm that I/we are members of the organization'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 finalization of the report.			
Report approved by:	X  Pete Madden	***President and CEO***	***February 21, 2018***
	Name	**Title**	**Date**
Report approved by:			
	Name	**Title**	**Date**
Report approved by:	***[name]***	***[title]***	***[date]***
	Name	**Title**	**Date**

13 Updates

Not applicable..

13.1 Significant changes in the Supply Base

Not applicable.

13.2 Effectiveness of previous mitigation measures

Not applicable.

13.3 New risk ratings and mitigation measures

Not applicable.

13.4 Actual figures for feedstock over the previous 12 months

Feedstock[10]

Under DBI ownership, start up for LBE began in a limited fashion November 2017 and commissioning is planned through 2018. Actual production figure ranges will be reported in the annual updates.

Prior to DBI ownership, the LBE operation's production reached a range of 0K to 200K pellet metric tonnes for 2016-2017 fiscal year:

f. Total volume of Feedstock: 200K to 400K green metric tonnes

g. Volume of primary feedstock: *c.* 80% to 100% of pellet feedstock

h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes. Note: No procurement history to base figures.

- Unknown amounts of certified to an SBP-approved Forest Management Scheme
    i. *FSC®: c. x% to x%*
    ii. *PEFC-endorsed forest management schemes: c. x% to x%*
        1. *SFI®: c. x% to x%*
        2. *ATFS™: c. x% to x%*
- Unknown amounts not certified to an SBP-approved Forest Management Scheme

i. List all species in primary feedstock, including scientific name
Unknown but expected to use predominantly Southern Yellow Pine – Majority Loblolly Pine (*Pinus taeda*), smaller quantities of other pines – Slash pine (*Pinus elliotii*), Shortleaf pine (*Pinus echinata*),

[10] Commercial sensitivity: Specific volumes omitted. Divulged feedstock volumes may be used by third parties to gain a competitive advantage in the catchment. Our actual 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.

Spruce pine (*Pinus glabra*), Virginia pine (*Pinus virginiana*) and de minimis volumes of Longleaf Pine (*Pinus palustris*) with possible minute component of mixed southern hardwoods of various merchantable species.

j. 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

k. Volume of secondary feedstock: *c* 0% to 19% residues

l. Volume of tertiary feedstock: *None anticipated*

Note: Precise volumes of feedstock types revealed to third-party auditors and SBP for review in the SAR.

13.5 Projected figures for feedstock over the next 12 months

Feedstock[11]

LBE operational production is designed to reach a range of 400K to 600K pellet metric tonnes at steady state. However, during ramp-up and commissioning spanning the 2017-2018 fiscal year[12] it most likely will reach 200K to 400K pellet metric tonnes:

f. Total volume of Feedstock: 400K to 600K green metric tonnes

f. Volume of primary feedstock: *c.* 80% to 100% of pellet feedstocks

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

- 20% to 39% 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%*
- 60% to 79% not certified to an SBP-approved Forest Management Scheme

h. 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

[11] Commercial sensitivity: Specific volumes omitted. Divulged feedstock volumes may be used by third parties to gain a competitive advantage in the catchment. Our projected 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.

[12] Based off commercial forecasts.

Presence of CITES or IUCN species section. Minute 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. In-woods produced material is available but will most likely only provide *de minimous* amounts of feedstock during ramp-up. The vast majority 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. Many components of these wide range of species may appear when in-woods chipping occurs. At present, in-woods chips is expected to comprise <1% 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 stand improvement treatments including mixed southern hardwoods making up a minute amount of the diverse species mix.

i. 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

j. Volume of secondary feedstock: *c* 0% to 19% residues

k. Volume of tertiary feedstock: *None anticipated*

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			
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
AL National Heritage Program				

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	
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	
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				
Local Government				
LaSalle Parish, LA Police Jury				
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	

Academia/Research/Advocacy Institutions				
Univ of Georgia	Univ of Arkansas	Texas A&M	Louisiana State Univ	Mississippi State Univ
Southwest Mississippi Community College	Louisiana Delta Community College	Southeast Arkansas College	Northeast Texas Community College	National Council for Air and Stream Improvement (NCASI)
Oak Ridge National Lab	Biomass101	Two Sides NA	World Resources Institute	Univ of AL
Auburn Univ	LA Tech	Central LA Tech-Alexandria		
Consultancy				
Dovetail Partners	F&W	Forisk	Forest2Market	
Industry[13]				
Transportation Firms	Sawmills	Chip Mills	Timber Dealers	DBI Customers
Current & Potential DBI Suppliers	Logging Firms	Pulp & Paper Manufactures	Institutional Forest Landowners	Real Estate and Forest Management Firms
Service Providers	Biomass Producing Peers	Oriented Strand Board Manufactures		
Law Enforcement & Law Experts				
MS Ag & Commerce Division	LSU Mineral Law Institute	Dendro Resources		

[13] Commercial sensitivity: Specific company names omitted due to current or potential business relationships. Information could be used to gain competitive advantage.

Appendix B

DBI Sustainability
2017 Stakeholder Consultation Results
Summary and Analysis

LBE Initial and ABE Follow-up Stakeholder Consultations, Held 5.19.2017 thru 7.17.2017

	Question (corresponds to SBP Std 1 Indicators)	Rating Scale (lower score indicates respondents' heightened confidence/satisfaction with verifiers)	Overall Rating (thresholds set in thirds)	Response Summary	Action Status	Action
Principle 1	**Indicator 1.1.1**: The Biomass Producer's(BP) Supply Base is defined and mapped. **Indicator 1.1.2**: Feedstock can be traced back to the defined Supply Base. **Indicator 1.1.3**: The feedstock input profile is described and categorized by the mix of inputs.	1 thru 5	1.10	Respondents provided and supported verifiers previously included in DBI's SBE. Rated within acceptable limits. Two comments addressed.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 1.2.1: The BP has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base.	1 thru 5	1.00	Respondents provided and supported verifiers previously included in DBI's SBE. Rated within acceptable limits. Two comments addressed.	Complete	Brought two verifiers to forefront from risk assessment for direct citation to supplement existing verifiers.
	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 European Timber Regulation (EUTR) legality requirements	1 thru 5	1.00	Respondents provided and supported verifiers previously included in DBI's SBE. Rated within acceptable limits. Two comments addressed.	Complete	Brought one verifiers to forefront from risk assessment for direct citation to supplement existing verifiers.
	Indicator 1.4.1: The BP 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.	1 thru 5	1.14	Respondents supported verifiers previously included in DBI's SBE and offered clarification for one verifier. Rated within acceptable limits. Two comments addressed.	Complete	Clarified existing verifier included to by providing a resource for confirmation of severance tax payments.
	Indicator 1.5.1: The BP has implemented appropriate control systems and procedures to verify that feedstock is supplied in compliance with the requirements of CITES.	1 thru 5	1.14	Respondents supported verifiers previously included in DBI's SBE. Rated within acceptable limits although within the threshold of caution. No comments.	No Action	No new verifiers received from the respondent(s).
	Indicator 1.6.1: The BP 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.	1 thru 5	1.00	Respondents provided and supported verifiers previously included in DBI's SBE and heightened importance of verifiers captured in the cited Risk Assessment. Rated within acceptable limits. Two comments addressed.	Complete	Brought two verifiers to forefront from risk assessment for direct citation to supplement existing verifiers.

	Question (corresponds to SBP Std 1 Indicators)	Rating Scale (lower score indicates respondents' heightened confidence/satisfaction in verifiers)	Overall Rating (thresholds set in thirds)	Response Summary	Action Status	Action
Principle 2	**Indicator 2.1.1**: The BP has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.	1 thru 5	1.00	Respondents provided and supported verifiers previously included in DBI's SBE and highlighted the importance of three verifiers. Rated within acceptable limits. One comment addressed.	Complete	Three verifiers brought to forefront from risk assessments and two additional verifiers from completed research were included to supplement existing verifiers for this indicator.
	Indicator 2.1.2: The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.	1 thru 5	1.00	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 2.1.3: The BP 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.	1 thru 5	1.00	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 2.2.1: The BP 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 minimize them.	1 thru 5	1.00	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 2.2.2: The BP has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality.	1 thru 5	1.00	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 2.2.3: The BP has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state.	1 thru 5	1.00	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 2.2.4: The BP has implemented appropriate control systems and procedures to ensure that biodiversity is protected.	1 thru 5	1.00	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).

	Question (corresponds to SBP Std 1 Indicators)	Rating Scale (lower score indicates respondents' heightened confidence/satisfaction in verifiers)	Overall Rating (thresholds set in thirds)	Response Summary	Action Status	Action
Principle 2	**Indicator 2.2.5**: The BP has implemented appropriate control systems and procedures for verifying that the process of residue removal minimizes harm to ecosystems.	1 thru 5	1.00	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	The BP has implemented appropriate control systems and procedures to verify that... **Indicator 2.2.6**: to verify that negative impacts on ground water, surface water and water downstream from forest management are minimized. **Indicator 2.2.7**: air quality is not adversely affected by forest management activities.	1 thru 5	1.00	Rated within acceptable limits. One comment addressed.	No Action	No new verifiers received from the respondent(s).
	The BP has implemented appropriate control systems and procedures for verifying that... **Indicator 2.2.8**: there is controlled and appropriate use of chemicals, and that Integrated Pest Management (IPM) is implemented wherever possible in forest management activities. **Indicator 2.2.9**: methods of waste disposal minimize negative impacts on forest ecosystems.	1 thru 5	1.00	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	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. **Indicator 2.3.2**: Adequate training is provided for all personnel, including employees and contractors. **Indicator 2.3.3**: Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.	1 thru 5	1.37	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	The BP has implemented appropriate control systems and procedures for verifying that... **Indicator 2.4.1**: the health, vitality and other services provided by forest ecosystems are maintained or improved. **Indicator 2.4.2**: natural processes, such as fires, pests and diseases are managed appropriately. **Indicator 2.4.3**: there is adequate protection of the forest from unauthorized activities, such as illegal logging, mining and encroachment.	1 thru 5	1.25	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).

	Question (corresponds to SBP Std 1 Indicators)	Rating Scale (lower score indicates respondents' heightened confidence/satisfaction in verifiers)	Overall Rating (thresholds set in thirds)	Response Summary	Action Status	Action
Principle 2	The BP has implemented appropriate control systems and procedures for verifying that... **Indicator 2.5.1**: legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected. **Indicator 2.5.2**: 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.	1 thru 5	1.67	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 2.6.1: The BP 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.	1 thru 5	1.00	Respondents provided and supported verifiers previously included in DBI's SBE all the while providing one verifier previously included in the risk assessments. Rated within acceptable limits. One comments addressed.	Complete	One additional verifier brought forth from the risk assessment for direct citation as a supplement to existing verifiers used for this indicator.
	The BP has implemented appropriate control systems and procedures for verifying... **Indicator 2.7.1**: that Freedom of Association and the effective recognition of the right to collective bargaining are respected. **Indicator 2.7.2**: that feedstock is not supplied using any form of compulsory labor. **Indicator 2.7.3**: that feedstock is not supplied using child labor. **Indicator 2.7.4**: that feedstock is not supplied using labor which is discriminated against in respect of employment and occupation. **Indicator 2.7.5**: that feedstock is not supplied using labor which is discriminated against in respect of employment and occupation.	1 thru 5	1.43	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 2.8.1: The BP 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.	1 thru 5	1.43	Respondents provided heightened importance for a verifier contained with the cited risk assessments. Rated within acceptable limits. One comment addressed.	No Action	Citation of the risk assessments and associated evidence used for third party certification suffices. Verifier was not added to the indicator.
	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. **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.	1 thru 5	1.67	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	Indicator 2.10.1: Genetically modified trees are not used.	1 thru 5	1.67	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).

Annex 1: Detailed Findings for Supply Base Evaluation Indicators

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

Preamble

Leading and broad means of verification applicable to most indicators:

The existence of, and effective application of, state and federal legislation is a key verifier that suppliers and forest landowners located within the defined fiber catchments operate in a social system upheld by the "rule of law" allowing democratic participation in governance. Third party certifications are evidence that DBI is complying with applicable legislation, regulations and/or accepted practices supported by company policies that meet or exceed expectations of the certifying body. 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** or external verifiers. All verifiers are reviewed by third party auditors but only external verifiers are publicly available.

Sustainable Forestry Programs:

- DBI Certificates
- Sustainable Forestry Initiative® (SFI) Certification and Public Audit Summary
- Programme for the Endorsement of Forest Certification™ (PEFC) Certification
- Forest Stewardship Council® (FSC) Certification and Public Risk Assessment
- Sustainable Biomass Program (SBP) certifications of Amite BioEnergy and Morehouse BioEnergy
- Sustainable Biomass Program (SBP) intent to certify La Salle BioEnergy statement
- American Tree Farm System™ Certification

Landscape Level Risk Assessments:

- Draft FSC® US National Controlled Wood Risk Assessment (US NRA)
- Global Forest Registry
- FSC® Controlled Wood Risk Assessments (CWRA) 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 Commitment to Sustainable Forestry

DBI's Biomass Sustainability Programs (BSPs) Contracts, Procedures & Records

	Indicator
Applicable	

1.1.1 **1.1.2** **1.1.3**	The Biomass Producer's Supply Base is defined and mapped. Feedstock can be traced back to the defined Supply Base. The feedstock input profile is described and categorised by the mix of inputs.

Finding	• Drax Biomass Inc's (DBI) fiber procurement catchment includes southern Arkansas, Louisiana, Mississippi and possibly west-central Alabama and eastern Texas in the United States. The procurement catchment is defined in more detail in **supplier contracts**. 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 draws feedstock within a 70-mile radius, but maintain the ability to procure out to a 100-mile radius in response to market pressures and weather events. All statements based on the 100-mile radius are made for precautionary purposes.
	• DBI's Biomass Producers consumes biomass feedstock comprised of lower value roundwood, thinnings, tops, and logging 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 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.
	  ○ 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 minority but growing portion from secondary sources.

Means of Verification	Lead Verifier: **Administrative and fiduciary responsibilities** to tax law have been defined and implemented which charges businesses to identify and capture the district of origin of fiber to enable states to assign and collect severance taxes. 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 and fiber type) while being derived from within the boundaries of the defined risk assessed region. Additional Citations: • Preamble Citations • Forest Property Taxation Systems in the United States: Each jurisdiction has its very own version of record retention &/or payment periods for timber purchases. • **Professional fiber procurement & sustainability consultancy** • **Transactional accounting system records**
Evidence Reviewed	• All means of verification reviewed

Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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. • 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. • Annual review of the **DDS** is completed to substantiate and reverify the "low risk" determination. • Level of enforcement and effectiveness is evident in news reports and timber trespass is not systemic in procurement catchment. • DBI conducted a comprehensive stakeholder consultation to capture feedback about legality issues in the procurement regions. • Suppliers are required to abide by all laws and regulations in **master gatewood purchase agreement (GWPA)**. • The World Bank has awarded the U.S. a Global Governance Index rating that exceeds 88% for Regulatory Quality (average from 2012-2015). • National Forest Planning provides avenue for public input to influence the management of the public's forest. • State Forestry BMP guidelines 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.
Means of Verification	Lead Verifier: 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. Property law is well established and policed through effective courts. Land use challenges absent and legal processes are present to establish and challenge land ownership in the wood procurement region. • Preamble citations • Stakeholder Consultation • Certificate of incorporation: Auth # 2211437 & File #: 5068290 verified • **Transactional accounting system records** • Forest Action Plans & Wildlife Action Plans, Ex LA • Southern Forest Futures Project • Southern Forests for the Future, Maps • Local zoning ordnances • The Global Governance Index for the United States • National Forest Planning Rule

	• State BMP Manuals
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• Each state DBI sources from has timber trespass and theft legislation, governing public agencies and enforcement bodies. • 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. • Illegal logging website's only references to the United States are in reference to U.S.-based companies operating in other countries and regarding the Lacey Act. • EIA website's only cites the United States with regards to U.S.-based companies operating in other countries concerning the Lacey Act. • Annual review of CWRA and **DDS** to substantiate "low risk" determination. • DBI conducted a comprehensive stakeholder consultation to capture feedback about legality issues in procurement regions. • Suppliers are obligated to abide by all laws and regulations by signatory of **GWPA**. • 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 reports.
Means of Verification	Lead Verifier 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.

	<table><tr><th>Texas</th><th>Mississippi</th><th>Louisiana</th><th>Arkansas</th><th>Alabama</th><th>Federal</th></tr><tr><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>State Timber Theft Law</td><td>US: Lacey Act</td></tr><tr><td>Publication explaining timber theft law.</td><td>Annual report presenting enforcement action stats</td><td>Timber theft cases & litigation discloser via search engine.</td><td>Annual reports presenting enforcement action stats.</td><td>2011 enforcement report</td><td>Enforcement Action: Article summarizing recent cases.</td></tr><tr><td>Enforcement action example.</td><td>Article presenting enforcement action stats for past two years.</td><td></td><td></td><td>Changes to AL forestry enforcement</td><td>Third party review of effectiveness of laws: Environmental Investigation Agency</td></tr></table> • Preamble citations • 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
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• **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. <table><tr><th>Mississippi:</th><th>Louisiana</th><th>Arkansas</th><th>Alabama</th><th>Texas</th></tr><tr><td>Payment window and access to load tickets</td><td>Provide load tickets & loader logs</td><td>Payment window</td><td>Forestry Records Law</td><td>Payment window and load tickets</td></tr></table>• 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
Means of Verification	Lead Verifier: 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. • Preamble citations • **Transaction System Records** • DBI's **receipts of paid severance tax**, tax liens and filing status (Ex: LA Dept of Revenue, MS Tax Lien Register) • DBI's Certificates of Good Standing (Ex: Louisiana Sec of State, Mississippi Sec of State) • Timber severance tax by state. • Arkansas Tax Depletion and need by AFC • Drax Annual Report
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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 CITIES species occur in wood procurement catchments. • 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. • 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. • **GWPA** obligates suppliers to abide by all laws and regulations as a signatory.
Means of Verification	Leading Verifier: 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). • Preamble citations • **Transactional System Records** • Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington DC, 1973) • Amendment to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Art.XI) (Bonn, Germany, 23 Jun 1979) • The Enforcement of CITES in the US

Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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 in particular 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.
Means of Verification	Lead Verifier: Existence and effective application of federal and state legislation and conventions for these aspects provides 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. • Preamble citations • Stakeholder Consultation • American Indian Religious Freedom Act of 1978 (amended 1994) • Indian Child Welfare Act of 1978 • Indian Citizenship Act of 1924 • Indian Self-Determination and Education Assistance Act of 1975 • Native American Languages Act of 1990 • Tribal Law and Order Act of 2010 • ILO Convention 169 • US Dept of Interior-Indiana Affairs • Intra-Tribal Councils of the region • USFS Tribal Relations
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	None

	Indicator
2.1.1 **2.1.2**	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. 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	• Drax Environmental Policy states "Staff are encouraged to identify areas where environmental improvements may be made, either to on-site impacts or to those caused by our procurement or by our suppliers." • DBI's Commitment to Sustainable Forestry states that "DBI is committed to implement its best efforts to avoid trading and sourcing wood from c) Wood harvested in forests where high conservation values are threatened by management activities." • **DBI Procedures** state "The review should include an assessment of the location of the tract, to determine whether there are known sensitivities. If known sensitivities exist, the procuring manager will liaise with the VP of procurement before deciding whether to accept the sale. Acceptance can take place if risk is low, or if controls are put in place to make risk of harm low." • FSC FM Criterion 6&7 and SFI FM Objective 4&6 require the identification, mapping, and protection of high conservation value areas in certified forests from which DBI sources. • There are no WRI/Global Forest Watch Frontier Forests, Smithsonian/IUCN Centres of Plant Diversity, or Greenpeace Intact Forests listed within the DBI supply area. • Conservation International has designated the North American Coastal Plain as a Global Biodiversity Hotspots. This area has a high level of endemism and is at risk to urban development and the lack of historic disturbance agents (i.e. fire) which promote the open pine savanna habitat type. DBI's sourcing is low-risk to this area and may contribute to conservation by providing improving markets therby discouraging forest divestiture and providing an economic outlet for lowgrade material from thinnings (important tool for restoring open pine habitat conditions characteristic of savanna habitats). • The sole WWF Global 200 #75 – the Southeastern Coniferous and Broadleaf Forest was dealt with as part of the AHEC study and the conditions have not changed. • Draft map issued by FSC available online. This online resource indicates that there are very limited risks within the catchments to the plants. There is a roadless area within the Kisatchie National Forest, however, its Designation as a "Wilderness" will assure that no wood will be sourced from this area. FSC has also recognized priority habitat in the Southern Appalachians (aquatic habitat, glades, montane longleaf) and the Ouachita river valley aquatic habitats. Risk to these habitats is low. Not only are they on the outside of the sourcing area, high BMP implementation rates protect water quality and glades and habitats supporting montane longleaf are not conducive to sourcing fiber from. However, we do include these areas in our training to assure recognition and protection. No proposals located in US for IUCN Green List as of yet. • Convention on Biological Diversity: No programs of work exists for the US as of yet. • 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. • Landscape Conservation Cooperative Network under development for the Gulf Coastal Plains and Ozarks. • Knowledge and awareness of regional conservation programs via SFI participation. • Review of other DDSs from region to monitor for additional sensitivities • Provision of low grade fiber market inherently enhances the value and health of forests • **Track and Trace system**

	• **GWPA** obligates suppliers to abide by all laws and regulations, achieve logger training and implement forestry best management practices as a signatory.
Means of Verification	Lead Verifier Effective implementation of the Endangered Species Act. State and Federal lands set aside in park system, wildlife management reserves, conservation easements, etc that receive statutory protection. Information resources and maps of high conservation valued areas and protected areas available for the wood procurement region. **Management systems, internal processes** and company policies reviewed as part of third party certifications. • Preamble citations • **SFI Evidence Matrix**: i.e. involvement with SFI SICs and inconsistent practices processes. • **Transactional system records** • **Annual supplier & SFI SIC communications** • Logger training curriculums and stats by state report, SGSF • **Nature Serve Data and Rapid Risk Assessment Tool** • Non Governmental Organizations: Ex The Nature Conservancy, Global Forest Watch, etc • Habitat Conservation Plans • Forest Stewardship Programs • Various Regional Conservation Programs • Evaluating Conservation Gains in North America through HCVF Assessments, WWF-Canada • High Conservation Value Resource Network • Forestry HCPs Reference Guide • Conservation Easement Map • USFWS Critical Habitat • World Wildlife Fund: WWF Maps • Convention on Biological Diversity: Forest Biodiversity • IUCN Green List • RAMSAR • Landscape Conservation Cooperative Networks • State Forest Action Plans • State Wildlife Action Plans
Evidence Reviewed	•All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	None

	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	• **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.** • DBI does not accept biomass derived from land conversion activities in which the land will be occupied by a use that will hinder reforestation in the long term. • Net increase in forested acreage or growth.

Means of Verification	Lead Verifier: 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. • Forest Inventories & Timber Products Output Reports • State Forest and Wildlife Action Plans • Global Forest Watch • Land Cover National Dataset, evergreen • FAO's Definitions Related to Planted Forests Land use change monitoring on landscape level, Southern Forest Futures Project • Tax Abatements and Land Use Tax Regimes by jurisdiction drive land use determinations • Gatewood purchase agreement • DBI Commitment to Sustainable Forestry • **Internal and external sustainability audits** • State Forest Action Plans • F2M's Historical Perspective on the Relationship between Demand and Forest Productivity in the US South
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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 that States BMP requirements. • **GWPA** 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, etc. • Louisiana, Mississippi, Alabama and Texas established forestry cost-share programs in 1998, 1974, 1975, and 1981 respectively. Arkansas does not currently have a tax program in place however, it 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) and Texas (1979) all have some variant of current use laws in place for forestry activities. • Federal PR statutes affecting forest management in the South listed in RA.

	• . States do, however, have regulations to protect water quality, air quality, and endangered species, and to control pesticide use. • Available information on location of HCVs is reviewed per company sustainability policy, to avoid impact to species or habitats of concern
Means of Verification	Lead Verifier: Key ecosystems are protected under various Federal and State programs. Hydrologic systems are protected by the Clean Water Act. The presence of market driven and sanctioned logger training curriculums and acceptable BMP implementation rates (The National Association of State Foresters 2015 BMP report found Nationwide implementation rates of 91%). Landowner assistance programs present, available and effective. Management systems, internal processes and company policies governing these aspects reviewed internally and as part of third party certifications audits. • NEPA Annual Reports • State BMP Manuals • Federal cost-share 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, etc. • National Conservation Easement Database • USFWS Critical Habitat Map • State level cost share programs for forestry States have version of current use laws for forestry activities State Forest Fact Sheets, Ex Mississippi Tax Abatements and Land Use Tax Regimes by jurisdiction Ex. Arkansas forestry manual • Logger training report, SGSF & SFI • **DBI's DDS** • SBP SBE • Draft FSC National CWRA • GWPA
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk RA** ☐ **Unspecified Risk at**
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	• 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 Gatewood Purchase Agreement** mandates that Sellers follow good and accepted forestry practices and agrees to abide by BMPs. Suppliers are subject to audit.
Means of Verification	Leading Verifier 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. SFI State Implementation Committees have active Inconsistent Practices Committees to limit sourcing from loggers violating BMPS. High levels of trained loggers are present due to market requirement. A catalogue of enforceable laws contributes to the maintenance of these attributes. • USGS Soil Maps • Protected Areas of the US • 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 • **Gatewood Purchase Agreement** • **F&W BMP Implementation Report for DBI's Procurement Region, 2015 & 2017**
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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.

	• 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. • The largest share—land used for outdoor recreation and land being maintained in its natural/wild/preserved state—is estimated at 252 million acres (80 percent of the special uses total). This acreage can be further dissected into national and State parks (32 percent of the special uses total) and wilderness/ wildlife uses (49 percent of the special uses total). • 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 wildlife/wilderness land. Driving this number are substantial increases in federally owned outdoor recreation and preservation areas, State-owned fish and wildlife areas, and State parks. • Effective and enforced environmental laws on the national and state levels are in place to ensure conservation of special resources.
Means of Verification	Lead Verifier Key ecosystems and habitats set aside and protected on federal and state lands. Private lands with key ecosystems and habitats are assisted with various Federal and State programs, many are placed under voluntary conservation easements Explicit protection of these attributes are delivered by well governed public agencies and reputable Non Governmental Conservation Groups. Existence and application of conservation laws such as Endangered Species Act and the Clean Water Act. • Preamble citations • The Endangered Species Protection Program, 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 • 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) • Nature Serve • Global Forest Watch • Federal and State Land Ownership and Jurisdiction National Conservation Easement Database USFWS Critical Habitat Map • Company CWRA and DDS • Internal and external sustainability audits • SBE & SBP RA • Stakeholder Consultation • Operational Control Procedure • Gatewood Purchase Agreement • Clean Water Act (section 404 for wetland protection): requires permit for permanent fill placed into wetlands. • Protected areas of the US Map • Logger Training Program Report, SGSF & SFI • NEPA Annual Reports

	• State Forest Action & Wildlife Plans
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	none

	Indicator
2.2.4	The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	• DBI has at its disposal a robust **DDS** with data provision from NatureServe, various other public agencies, and NGOs,to identify the presence of species and habitats of concern within the procurement catchment. • 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
Means of Verification	Lead Verifier Best Management Practices for forestry established in each jurisdiction and monitored to achieve compliance to the Clean Water Act. The existence and implementation of the federal ESA, state wildlife protection laws, Natural Heritage System/Nature Serve, compliance with CWA (aquatic species protection) through high levels of BMP implementation, forest certification programs focused on biodiversity which influence the supply chain and encourage high levels of logger training of acts like ESA amongst a plethora of conservation efforts administered by well governed agencies. High levels of trained loggers educated in these subjects present due to market requirements. • USDA National Report on Sustainable Forests—2010 Pg. II-121 • Habitat Conservation Plans, Annual Funding of Awards & Status Report • Agricultural and Forestry Extension Services • SFI & American Forest Foundation, Conservation and Research Grants • The Endangered Species Protection Program, State and Federal Versions • 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), • 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), • SBE and SBR, SBP • Louisiana: http://www.wlf.louisiana.gov/wildlife/explanation-endangered-species-rankings • Alabama: http://www.aces.edu/natural-resources/wildlife/endangeredspecies.php • DBI's DDS • Avoidance of Biodiversity procedure • Internal and external sustainability audits • Draft FSC National CWRA • USDA National Report on Sustainable Forests—2010 Pg. II-121 • SFI Evidence Matrix • F&W BMP Compliance Report • HCP Annual Funding of Awards & Status Report • Logger Training Report, SGSF & SFI • Natural Heritage Databases via NS: State Fish and Wildlife Agencies and Natural Heritage Programs
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	none

	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	• 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. • US protected areas database and wildlife action plans identify areas where special management plans are administered by the governing public agency which could

	include biomass retention guidelines. These areas have special protections so listing as a verifier indicates proactive measures to protect ecosystems from harm. • 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: • http://www.ingentaconnect.com/content/saf/jof/2016/00000114/00000001/art00004 and 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 • Internal sustainability programs and external 3rd party certification audits verify resource protection.
Means of Verification	Lead Verifier 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). 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. • BMP manuals across the southern states • DBI's BMP monitoring program • State Level BMP Implementation Reports: Aggregated periodic report by SGSFs. • 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 • Stewardship Forest Program & other forest landowner assistance programs as listed in 2.2.4 • Pinchot Institute compendium of biomass harvesting research • Soil and Water Resources Conservation Act (RCA) • Clean Water Act • Web Soil Survey • USDA National Report on Sustainable Forests—2010 Pg. II-121 • Habitat Conservation Plans, Annual Funding of Awards & Status Report • Agricultural and Forestry Extension Services in each jurisdiction • SFI & American Forest Foundation, Conservation and Research Grants • Internal and external audits • The US Protected Area Database contains information about protected lands that was updated 2017: https://gapanalysis.usgs.gov/padus/

	• State Wildlife Action Plans • 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: http://ncasi.org/Publications/Index.aspx
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• All states that DBI procures from has 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 continuously monitor BMP effectiveness, respond to public water quality complaints, and work with state environmental protection agency, (responsible for CWA regulatory compliance) • **Gatewoood 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. • 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.
Means of Verification	Lead Verifier Best Management Practices for forestry are established in each jurisdiction and monitored to achieve compliance to the Clean Water Act. High participation rates in sanctioned logger training programs present due to market drivers. Hydrologic systems

	are protected by the Clean Water Act. The presence of market driven and sanctioned logger training curriculums and acceptable BMP implementation rates (The National Association of State Foresters 2015 BMP report found BMP Nationwide implementation rates of 91%) • BMP studies, see Effectiveness of forestry best management practices in the United States, Cristan et al. 2016 • State BMP Monitoring Reports f2m bmp compliance blog State Forestry and Wildlife Action Plans • DBI's SBP SBE • SFI, FSC, ATFS Standards • **SFI Evidence Matrix** • **F&W BMP Compliance Report** State BMP survey results (i.e. MS state BMP survey results: MS 2016 BMP Survey • SFI Performance Measure 2.2 requires BMP Monitoring across the wood and fiber supply area • The US Protected Area Database contains information about protected lands that was published in April 2009: (http:! /protected lands. net/pad us/). • i.e MS State Wildlife Action Plans • 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 (http://www.ncasi.org/Downloads/Download.ashx?id=10204)
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	All states DBI sources from have environmental compliance and monitoring agencies with ample levels of enforcement. • 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. • **Gatewood 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. • Interagency Fire Prevention Strategy: 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.
Means of Verification	Lead Verifier Public agencies enforce regulations that govern air quality and provide resources to mitigate risks. • Intrinsic values of forest management • "Clean Air Act" Dept. of Environmental Quality in each jurisdiction Smoke management guidelines governed by forestry commissions by jurisdiction State Forest & Wildlife Action Plans Interagency Fire Prevention Strategy • SBP RA • http://www.deq.state.ms.us/MDEQ.nsf/page/Main_Home?OpenDocument • http://www.tceq.state.tx.us • http://www.deq.louisiana.gov/portal/ • http://www.adeq.state.ar.us • DBI Environmental Permits • i.e. LA Burn Permit, MS Burn Permit, AR Burn Permit, AL Burn Permit, TX Burn Permit
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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 nonriparian 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.
Means of Verification	Leading Verifier: Public agencies govern these elements. Agencies offer educational services and require licensing. Inherit benefits of thinning encouraged by biomass markets. • 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 Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Pesticide Applicator Training, Licensing and regulations by jurisdiction NRCS, IPM Standard Noxious Weed Grant Programs • 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 • State Pesticide General Permits (PGPs)
Evidence Reviewed	• All means of verification reviewed
Risk Rating	**x Low Risk** ☐ **Specified Risk** ☐ **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	• 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	Lead Verifier Public agencies govern compliance of these elements. Best Management Practices for forestry are established by jurisdiction and monitored to achieve compliance to the Clean Water Act. High levels of trained loggers are present due to market requirements. • **Gatewood Purchase Agreement** • **Internal and External Audits** • Solid Waste Disposal Act Resource Conservation and Recovery Act of 1976 (RCRA) Depts. of Environmental Quality by jurisdiction

Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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 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. ○ 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.
Means of Verification	Lead Verifier 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. • 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	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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. • Further details on training is given in DB's Standard document DB Management System document **DBI MS 007-A**, Competence, Training and Awareness. • **Drax CoC Manual** Section I.F. This document has been updated to incorporate SBP requirements. • The Gatewood 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, Louisiana, Mississippi, and Texas, offer logger training on an annual basis.
Means of Verification	Lead Verifier Credentialing and training programs exist for all professionals in the supply chain by jurisdiction and/or by employer. • Forest Management and Procurement Standards (FSC, SFI, PEFC, and ATFS) • Logger Training Report State and Professional Credential Boards (i.e. Foresters-RFs by State and SAF CFs, Logger-State Level, etc) • Drax Investment in Employees • **CoC Manual** • **Op Control Procedure** • **Internal and external sustainability audits** • **DBI Document Management System** • **GWPA**
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
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	• 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 as a whole has on the state.
Means of Verification	Lead Verifier Location of pellet plants and infrastructure improves local economies, provides exponential effects and contributes to employment. • 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	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
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	Demonstration of resilient forests. Forests must remain as forests. Providing a market grants the landowner forest management tools to maintain healthy forests of value all the while providing ecosystem services for society. • Southern Forests Future Project states: 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.

	• 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 in MS, AR and LA. • 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 communities 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. • Logger Training is required of all suppliers via the **GWPA** and SFI certification. • DBI Procurement and Sustainability staff boasts a multitude of experienced foresters supported by many forms of credentials. Several states in DBI's catchment require forester registrations.
Means of Verification	Lead Verifier Best Management Practices for forestry are established in each jurisdiction and monitored to achieve compliance to the Clean Water Act. Sanctioned logger training programs 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. • The Southern Forest Futures Project, USDA • The Environmental Quality Incentives Program (EQIP), The Forest Land Enhancement Program, Habitat Conservations Plans • 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 (ie ATFS, FSC, SFI, PEFC) • Forestry BMP Implementation Reports • Privately sponsored programs such as the Longleaf Restoration Program sponsored by The Longleaf Alliance • 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 communities conservation acts, ect. • SBP SBE • Stakeholder Consultation • **Gatewood Purchase Agreement** • DBI Staff Credentials, Forestry Credential Boards • http://www.mfc.ms.gov/pdf/forest_assessment/ms_assessment_resource_strategy_2010.pdf • State Forest & Wildlife Action Plans

	• For an example of state level protections and their effectiveness, see: Bioassessment of Silviculture Best Management Practices in Arkansas, available at: http://forestry.arkansas.gov/Services/ManageYourForests/Documents/bioassessment.pdf"
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	**none**

	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	• 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). ○ There is a current outbreak of the southern pine beetle in DBI's souring 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. • Interagency Fire Prevention Strategy: 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 • Drax Sustainability Policy states "Not adversely affect protected or vulnerable biodiversity and where possible we will give preference to biomass production that strengthens biodiversity." - See more at: http://www.drax.com/biomass/sustainability-policy/#sthash.nfaO36gM.dpuf • Drax Environmental Policy States "Staff are encouraged to identify areas where environmental improvements may be made, either to on-site impacts or to those caused by our procurement or by our suppliers." - See more at:

	http://www.drax.com/sustainability/environment/environmental-policy/#sthash.xwZ6t4Ke.dpuf • DBI's Commitment to Sustainable Forestry states that "DBI's Sustainable Forestry Policy is to promote the Principles of Sustainable Forest Management including: ...protecting special sites and biological diversity...
Means of Verification	Lead Verifier 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. Well governed public agencies and programs exist to support landowners in the management of these elements. • See 2.2.8 Chemical Applicator & BMP Info • State jurisdiction burn permits and smoke guidelines • State Forest & Wildlife Action Plans • Interagency Fire Prevention Strategy, 2000 Southern Wildfire Prevention Strategy • State of America's Forest Report, SAF • Southern Forest Futures Report, USDA • Regulations, agencies, programs and enforcement usually administered by a state forestry commission or agriculture dept. Most governed by a state forester. • Protected areas of the US map & set-aside of key ecosystems and habitats • FIA Forest Inventories • NRCS Integrated Pest Management program • State Forest Fact Sheets • Drax Company Policies • See 2.2.8 Chemical Applicator & BMP Info • LA Burn Permit • MS Burn Permit • AR Burn Permit • AL Burn Permit • Interagency Fire Prevention Strategy • Internal and external sustainability audits • Regulations, agencies, programs and enforcement • **Consultant Reports** • Forestry Commissions
Evidence Reviewed	• All means of verification reviewed
Risk Rating	**x Low Risk** ☐ **Specified Risk** ☐ **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	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 DBI sources. Pathways for recourse exists in each state to remedy the problem. Also see 1.3.1

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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, FSC Company Controlled Wood Risk Assessment & the draft National Risk Assessment find legality to be of "Low Risk" in DBI's procurement regions. See http://www.globalforestregistry.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 Gatewood 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 indicates that there is 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.

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<tr><td>Means of Verification</td><td>
Lead Verifier
Each jurisdiction with well governed agencies enforce these elements that carry civil and criminal penalties.

SBP RA

<table>
<tr><td></td><td colspan="5">Each jurisdiction has its very own version of legislation governing illegal logging and land use rights.</td></tr>
<tr><td>Texas</td><td>Mississippi</td><td>Louisiana</td><td>Arkansas</td><td>Alabama</td><td>Federal</td></tr>
<tr><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>State Timber Theft Law</td><td>US: Lacey Act</td></tr>
<tr><td>Publication explaining timber theft law.</td><td>Annual report presenting enforcement action stats</td><td>Timber theft cases & litigation discloser via search engine.</td><td>Annual reports presenting enforcement action stats.</td><td>2011 enforcement report</td><td>Enforcement Action: Article summarizing recent cases.</td></tr>
<tr><td>Enforcement action example.</td><td>Article presenting enforcement action stats for past two years.</td><td></td><td></td><td>Changes to AL forestry enforcement</td><td>http://www.eia-international.org</td></tr>
</table>

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
3LOG Records (Severance Tax)
Internal and external sustainability audits
Operational Control Procedure
State Wildlife and Forestry Action Plans
Company policies

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</table>

	• http://en.wikipedia.org/wiki/Declaration_on_the_Rights_of_Indigenous_Peoples • http://www.state.gov/documents/organization/184099.pdf Announcement of U.S Support for the United Nations Declaration on the Rights of Indigenous Peoples • **Gatewood Purchase Agreement** • Also see 1.3.1 Citations Each jurisdiction has its own version of legislation governing illegal logging and land use rights. 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 in reference to U.S.-based companies operating in other countries and regarding the Lacey Act. "Illegal" Logging and Global Wood Markets, Seneca Creek Assoc & 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
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	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. • 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 in particular 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
Means of Verification	Lead Verifier 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. • State of the Forest, SAF • Draft FSC National CWRA • SBP SBR • Stakeholder Consultation Major Uses of Land in the US, 2007, Economic Research Service Forestry and African American Land Retention, US Endowment for Forestry and Communities. Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples State of America's Forest, SAF 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.) Economic Research Service Reports, Example
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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
Means of Verification	Lead Verifier 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 • Dept. of Interior, Federal Subsistence Management Program Average annual rainfall by state FIA data and supplemental reports and analysis State of America's Forest, SAF ERS Report
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• 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.). • Forest-Use Land. Forest-use land in 2007 includes 127 million acres of grazed forests, but excludes an estimated 80 million forest acres in parks, wildlife areas, and other special uses. Forest-use land increased 20 million acres (3 percent) from 2002 to 2007, continuing a trend that became evident in 2002 and reversing an almost 50-year downward trend. The 14-percent decline in forest-use land between 1949 and 2002 was largely due to forest-use land reclassified to special-use areas. Economic Research Service. Major Uses of Land in the United States, 2007 • 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
Means of Verification	Lead Verifier 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. • State BMP Monitoring Reports • Employment Law Poster • Stakeholder Consultation • Employment & Labor Law 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	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	All employees in the US are allowed to unionize and gather for collective bargaining. Unions exist all across the US and have for quite some time signifying their ability to operate lawfully. • 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.
Means of Verification	Lead Verifier Statutory labor & employment laws and regulations are protective of employees' rights, health and safety. 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. • Equal Opportunity Employment Act • 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	• All means of verification reviewed
Risk Rating	**x Low Risk** ☐ **Specified Risk** ☐ **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	Sufficient laws and consequences exist in the US to deter forced labor from occurring. • 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** vets suppliers to ensure no violations of the sort are on record.
Means of Verification	Lead Verifier Statutory labor & employment laws and regulations are protective of employees' rights, health and safety. 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. • 18 U.S. Code § 1589 - Forced labor • **Internal and external sustainability audits** • PEFC Guidance Review • **Operational Control Procedure (KYV)**
Evidence Reviewed	• All means of verification reviewed

Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	Strong and effective legislative controls are in place for this aspect in the wood procurement catchment. • 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 a number of 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. • 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.
Means of Verification	Lead Verifier Statutory labor & employment laws and regulations are protective of employees' rights, health and safety. 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 • Op Control Procedure (KYV) • Stakeholder Consultation • Federal Labor Laws • Company CWRA and DDS
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	Strong and effective legislation exists to prevent discrimination. • 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. Plus many more • 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 of 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 of the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.
Means of Verification	<u>Lead Verifier</u> Statutory labor & employment laws and regulations are protective of employees' rights, health and safety. 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 • SBP SBR • **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 of the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.
Evidence Reviewed	• All means of verification reviewed
Risk Rating	**x Low Risk** ☐ **Specified Risk** ☐ **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	• 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 a number of 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. • 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. • **Gatewood Purchase Agreement:** Signatories must abide by all laws or be in breech. • 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 of the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.
Means of Verification	Lead Verifier Statutory labor & employment laws and regulations are protective of employees' rights, health and safety. 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 • SBP RA • DBI's **DDS** • **Gatewood Purchase Agreement** • Stakeholder Consultation • 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 https://survey.ituc-csi.org/

	• The US has not ratified all of the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.
Evidence Reviewed	• All means of verification reviewed
Risk Rating	**x Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	**none**

	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	• 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 • 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. • 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. • Gatewood 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

Means of Verification	Lead Verifier High levels of trained loggers receiving safety training present due to market requirements. Laws and regulations exists to establish and govern minimum standards and establish safe conditions for employees.Related management systems, internal processes and company policies are reviewed as part of third party external audits • Employment Law & Labor Law Requirements Logger Training Report OSHA 1910.266 & eTOOL Supporting Company Policies: Drax Health & Safety Policy • Employment Law Poster • Federal Laws applicable to Labour • **DBI employee handbook** has EEO policies in place • SBP SBR • **Gatewood Purchase Agreement** • **Internal and external audit** • **Employee training log** • Logger Training Report • Company Policies • FSC Values • State specific labor laws • State specific logger training verification websites : Ex. MS PLM
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **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	• The primary feedstock for the pellet plant is SYP with minority amounts of incidental hardwoods. SYP does grow in fully inundated and traditional wetlands or peatlands. Where there are wetlands in the sourcing area, these are strongly protected by legislation to remain as wetlands through the Clean Water Act. No change can be made to the hydrology of wetlands without the permission of the Army Corps of Engineers, who oversee and implement CWA legislation. Wetlands designated as sensitive areas will be included in DBI's DDS. • Implementation of BMP's is a further control to maintain the quality of wetlands. • There is not a predominance of peat soils in the pine growing areas of the catchment. • Historic consumption Vs current consumption including DBI • 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.

Means of Verification	Lead Verifier 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 processes and company policies are reviewed as part of third party external audits. • Forest Soils, Charles H. (Hobie) Perry and Michael C. Amacher State BMP Manuals F2M BMP Compliance Blog BMP implementation and info library Clean Water Act (sec 404) FIA Data and supplemental reports and analysis, TPO Rpts The Southern Forest Futures Project: technical report. Gen. Tech. Rep. SRS-178., Southern Research Station Resource Planning Act Data Decline in the pulp and paper industry: Effects on backward linked forest industries and local economies, USDA Market Response Article, Karen Apt, USDA • Records showing use of SYP, including 3 Log and maps. • Procedures and contractual requirements for implementation of BMP's • Gatewood Purchase Agreement • Consultancy • Forest Inv & Fact Sheets • Stakeholder Consultation • Company CWRA and DDS • F&W BMP Implementation Report • MS Institute for Forest Inventory • F2M's Historical Perspective on the Relationship between Demand and Forest Productivity in the US South
Evidence Reviewed	• All means of verification reviewed
Risk Rating	**x Low Risk** ☐ **Specified Risk RA** ☐ **Unspecified Risk at**
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	• 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. • 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. Forest carbon Forecasts • We estimate the carbon stored in southern forests in 2010 at about 12.4 billion tons, including carbon stored in eight pools: down trees, standing dead trees, litter, soil organic carbon, live trees aboveground and belowground, and understory plants aboveground and belowground. Aboveground live trees and soil organic material comprise 80 percent of the total carbon stock. Forecasts of future forest carbon stocks reflect changes in the amount of forest area and the composition of the forest inventory. However, the model tracks only the carbon pool in forests and does not account for carbon transfers to agricultural and other land use pools. Likewise, the model does not account for carbon that leaves forests as products and may remain sequestered for long periods of time in housing or other end uses (e.g., Heath and others 2011). • Changes in forest carbon pools reflect both changes in growing stock volumes and changes in forest area (figs. 5.16 and 5.17). Under most Cornerstones, tree carbon peaks in 2020 and then levels off or declines; the exception is the low-urbanization/high-timber-prices Cornerstone C whose forecast peaks in 2030. At most, the forest carbon pool in 2060 is 5 percent smaller than the pool in 2010 (a net emission of about 600 million tons). Carbon accumulates as a result of net biomass growth on forested lands (fig. 5.17.F). • "A little research into the records of states with significant forest products industry activity shows that many have a compliance rate higher than 90 percent. In fact, states with the most robust harvest activity often have the highest levels of compliance." MS=93%, LA=96%, AR=86%, Tx=92%. F2M BMP Compliance Blog • "Pulp, paper, and paperboard mills consume close to 52 percent of southern roundwood, providing a significant market to southern forest landowners. Declining numbers of pulpwood-using mills and downward trends in mill capacity, however, present a growing challenge to the southern forest sector." USDA • 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 • 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	Lead Verifier 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 • **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 • 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. • F2M's Historical Perspective on the Relationship between Demand and Forest Productivity in the US South
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	none

	Indicator
2.10.1	Genetically modified trees are not used.
Finding	• The Global Forest Registry (www.globalforestregistry.org) indicates 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."
Means of Verification	Lead Verifier Mechanisms and permitting processes in place to govern usage should economically viable uses emerge. Related management systems, internal processes and company policies are reviewed as part of third party external audits. • FSC Global Forest Registry www.globalforestregistry.org • 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 Assessment of Lawful Harvesting & Sustainability of US Hardwood Exports, AHEC
Evidence Reviewed	• All means of verification reviewed
Risk Rating	x **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**

Comment or Mitigation Measure	**none**