SBP

Sustainable Biomass Program

SCS Global Services Evaluation of Morehouse BioEnergy Plant Compliance with the SBP Framework: Public Summary Report

Fourth Surveillance Audit

www.sbp-cert.org

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

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

Document history

Version 1.0: published 26 March 2015

Version 1.1: published 30 January 2018

Version 1.2: published 4 April 2018

Version 1.3: published 10 May 2018

Version 1.4: published 16 August 2018

Table of Contents

1 Overview

2 Scope of the evaluation and SBP certificate

3 Specific objective

4 SBP Standards utilised

4.1 SBP Standards utilised

4.2 SBP-endorsed Regional Risk Assessment

5 Description of Company, Supply Base and Forest Management

5.1 Description of Company

5.2 Description of Company's Supply Base

5.3 Detailed description of Supply Base

5.4 Chain of Custody system

6 Evaluation process

6.1 Timing of evaluation activities

6.2 Description of evaluation activities

6.3 Process for consultation with stakeholders

7 Results

7.1 Main strengths and weaknesses

7.2 Rigour of Supply Base Evaluation

7.3 Compilation of data on Greenhouse Gas emissions

7.4 Competency of involved personnel

7.5 Stakeholder feedback

7.6 Preconditions

8 Review of Company's Risk Assessments

9 Review of Company's mitigation measures

10 Non-conformities and observations

11 Certification recommendation

1 Overview

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Primary contact for SBP:	Sarah H Sarah Harris, sharris@scsglobalservices.com
Current report completion date:	31/Aug/2019
Report authors:	Tucker Watts
Name of the Company:	Drax Biomass Inc., Morehouse BioEnergy, 7070 Carl Road, Bastrop, LA 71220 Corporate address: Drax Biomass Inc., 2571 Tower Drive, Monroe, LA 71201
Company contact for SBP:	Kyla Cheynet kyla.cheynet@draxbiomass.com
Certified Supply Base:	Arkansas, Mississippi, Louisiana,east Texas/Oklahoma and western Tennessee.
SBP Certificate Code:	SBP-04-02
Date of certificate issue:	01/Aug/2016
Date of certificate expiry:	31/Jul/2021

This report relates to the Fourth Surveillance Audit

2 Scope of the evaluation and SBP certificate

The scope of this surveillance audit included a review of procedures, documentation, records and databases to ensure the organization's management system is appropriate to ensuring conformance to SBP Standards 1, 2, 4, and 5. Other audit methods used were field audits, site walkthrough of pellet mill and interviews with relevant staff, port representative and supplier representatives. The evaluation included a review of documentation such as the Supply Base Report including the Risk Assessment, due diligence systems, supplier contracts and SAR, among others.

The scope of the supply base was expanded by adding counties in the following states: Alabama, Oklahoma, Tennessee and Arkansas.

This certificate covers production and distribution of wood pellets, for use in energy production, at Morehouse BioEnergy LLC and transportation to Baton Rouge Transit LLC for storage, aggregation and seafaring vessel loadout. It also covers a Supply Base Evaluation for the sourcing of feedstock from the states of Arkansas, Louisiana, Mississippi, and portions of Alabama, Texas, Oklahoma, and Tennessee.

3 Specific objective

The specific objective of this surveillance audit was to confirm that the Biomass Producer's management system is capable of ensuring that all requirements of SBP Standards 1: Feedstock Compliance Standard, 2: Verification of SBP-compliant Feedstock, 4: Chain of Custody, and 5: Collection and Communication of Data (including Instruction Documents 5A: Collection and Communication of Data, 5B: Energy of GHG Data, 5C: Static Biomass Profiling Data) and Instruction Document 5D: Dynamic Batch Sustainability Data are implemented across the entire scope of certification. This was achieved by review of risk assessments, procedures, GHG and other data, observation of harvest sites, and interviews with key personnel and stakeholders

The following critical control points were identified and evaluated:

*Feedstock procurement: All wood delivered to the mill is tracked in a centralized system. Prior to delivery of round-wood, in-woods chips, saw dust or shavings to the scale house, the owner name, district of origin (Lat/Long), product type, etc. are obtained from the supplier.

*Storage and processing: Roundwood is processed into wood pellets by being chipped, dried, hammered, and extruded into pellets and the bark is used as boiler fuel. In-woods chips are dried, hammered, and extruded into pellets. Sawmill residual is hammered and pelletized. The conversion factors used to allocate the Roundwood, thinning, in-wood chips and secondary residuals into pellets are reasonable.

*Volume Accounting: The procedures detail the process to properly maintain the volume credit spreadsheet, with provisions for subtracting certified product sold.

*Outgoing transactions: Invoices are issued, and all outgoing transactions of SBP-certified biomass are recorded in the DTS

*Energy data collection and reporting: The organization developed and maintains databases to record data values and calculate energy data as required by Standard 5 and keeps records that substantiate the data.

4 SBP Standards utilised

4.1 SBP Standards utilised

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

☒ SBP Framework Standard 1: Feedstock Compliance Standard (Version 1.0, 26 March 2015)

☒ SBP Framework Standard 2: Verification of SBP-compliant Feedstock *(Version 1.0, 26 March 2015)*

☒ SBP Framework Standard 4: Chain of Custody *(Version 1.0, 26 March 2015)*

☒ SBP Framework Standard 5: Collection and Communication of Data *(Version 1.0, 26 March 2015)*

4.2 SBP-endorsed Regional Risk Assessment

Not applicable

5 Description of Company, Supply Base and Forest Management

5.1 Description of Company

Morehouse Bioenergy Plant is designed to consume 1 million to 1.2 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 arrive 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 150 miles of MBE's fiber catchment in 2009 was estimated to be in excess of 23 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 short tons per year. Morehouse BioEnergy, LLC consumes 4% of the roundwood in the market according to a 2019 Forisk report. Sawmills are slightly smaller, consuming on average around 300,000 green short tons per year.

5.2 Description of Company's Supply Base

MBE purchases the majority of its fiber indirectly from private landowners with negligible amounts originating from public ownership via a fiber supplier network. About half of the fiber originates from institutionally owned private forests while the other half is derived from family-owned private forests. The plan is to increase the amount of residual fiber consumption where available. The supply base was expanded by counties in southern Arkansas and western Alabama.

Land Use and Ownership patterns

Forestry followed is the dominant land use in the MBE catchment. Crop agriculture is the second most common land use in the MBW catchment. The majority of forests in these areas have been harvested and regenerated multiple times over the last two centuries.

Over 80% of the forests surrounding MBE are privately owned, with most held by non-institutional private family forest owners. There is also a significant amount of land owned and managed by large corporations (institutional investors). 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.

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 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].

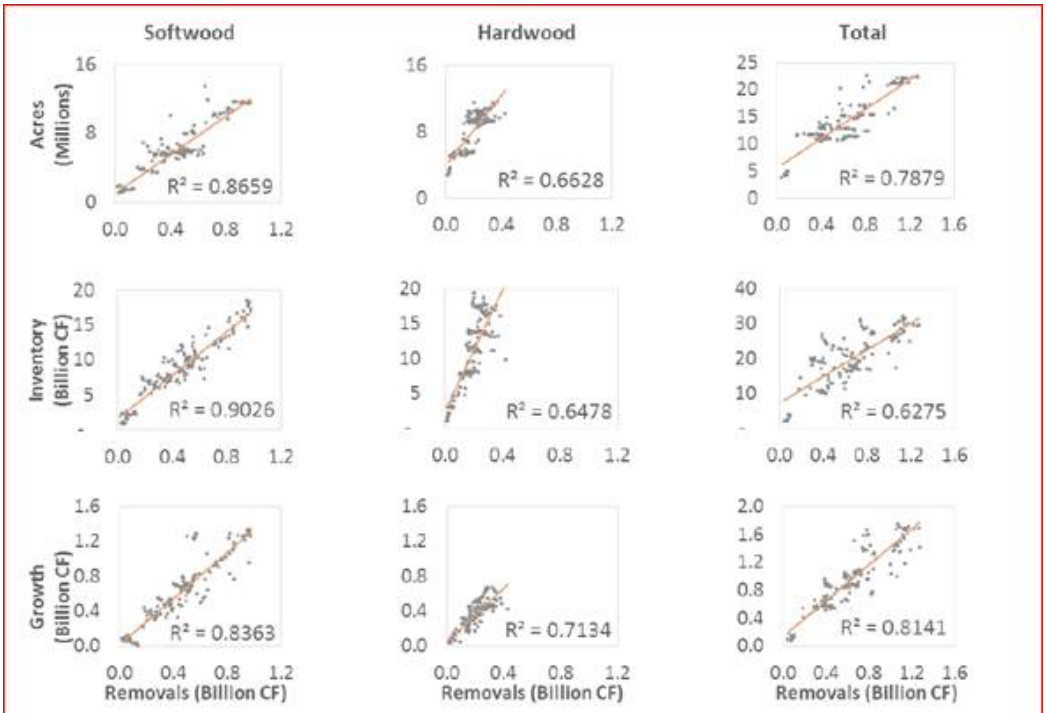


Figure 1-12 Private Removals vs. Acres, Inventory and Growth by Species, 1968-2015
(Sources: US Forest Service Forest Inventory and Analysis database, Forest2Market calculations.)

Senescence of the US pulp and paper industry has resulted in the closure or curtailment of several large pulp mills in or adjacent to the catchment that collectively consumed over 3 million tonnes of feedstock each year. 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 pulp mills.

The overall market downturn, subsequent housing market crash of 2008, and the slow recovery in residential construction has resulted in supressed levels of demand for sawtimber. This has produced an increase in stocks of larger-diameter trees, with a corresponding reduction in felling and replanting. These market dynamics have had long-term consequences for the structure of the forest.

A recent uptick in housing starts has meant increased demand for lumber. Sawmills have increased output, and in some areas new sawmilling capacity has emerged. Increase in resource use has been the story of US Forests. As described in the paragraphs above, the renewal process and the market response to increased demand have led to forests staying as forests, increased productivity and increased inventories (carbon stores). One outcome may be a decline in growth-drain ratios in some catchments. This is to be expected and allows the process of renewal of the forest to continue.

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

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

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[2]. In areas with strong markets for forest products, we should expect forests to stay as working forests, whereas other areas may cycle out of forestry into row crops or husbandry 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 good forest management practices.

MBE's catchment also experienced the change of ownership in several privately-owned lumber manufacturers to publicly traded companies along with the upgrading/expansion of curtailed mills in the region. The new sawmill ownerships employ SFI Fiber Sourcing certification more readily than legacy owners.

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 as a whole, and in MBE's catchment, annual growth exceeds annual drain by a significant margin (USDA Forest Service, 2010)[3] with a net gain in inventory of 23% since 2006.

The main reasons for this include a productive land base that benefits from long growing seasons, sufficient precipitation, and healthy soils, as well as the longstanding engagement of experts and professionals from across industry, academia, and public agencies which help advance sound forest management practices. Species selection is another principal factor, as the majority of landowners grow trees that are indigenous to the area, which creates environmental and economic benefits, such as maintenance of habitats for local flora and fauna, as well as establishing a resilient native growing stock with improved pest and disease resistance. Federal and state governments also provide effective oversight to ensure that forest activities comply with relevant laws and regulations and minimise environmental harm. Moreover, each state employs long-established "Best Management Practices", with programs to promote logger training and audits that demonstrate high compliance rates.

Though the region also possesses a vigorous and productive hardwood sector, MBE primarily uses Southern Yellow Pine (SYP), an abundant and highly productive species that's inventory has increased by 43% since 2006. 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. There is a robust sawmilling market for faster growing chip-n-saw logs and larger sawlogs in the MBE catchment area.

Thinning is an important forest management strategy for growing sawlog-quality SYP. Stands are typically thinned at 12-15 years old and again at 18-20 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

[2] Morehouse Family Forest Initiative
[3] USDA Forest Service Forest Inventory Analysis Program. 2010 data assessed and critiqued by consultancy for procurement region. Accessed May, 2012. Database accessible at http://www.fia.fs.fed.us/.

the forest and improves wildlife habitat. Forest thinnings make up a significant proportion of the feedstock for MBE.

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. MBE 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 sold into sawlog markets.

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

Presence of CITES or IUCN species

There is no Convention on International Trade in Endangered Species of Wild Flora and Fauna ("CITES") listed species in the catchment that are threatened or otherwise impacted by forest management activities. There is one International Union for Conservation of Nature ("IUCN") Red List of Threatened Species, 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)[4].

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:

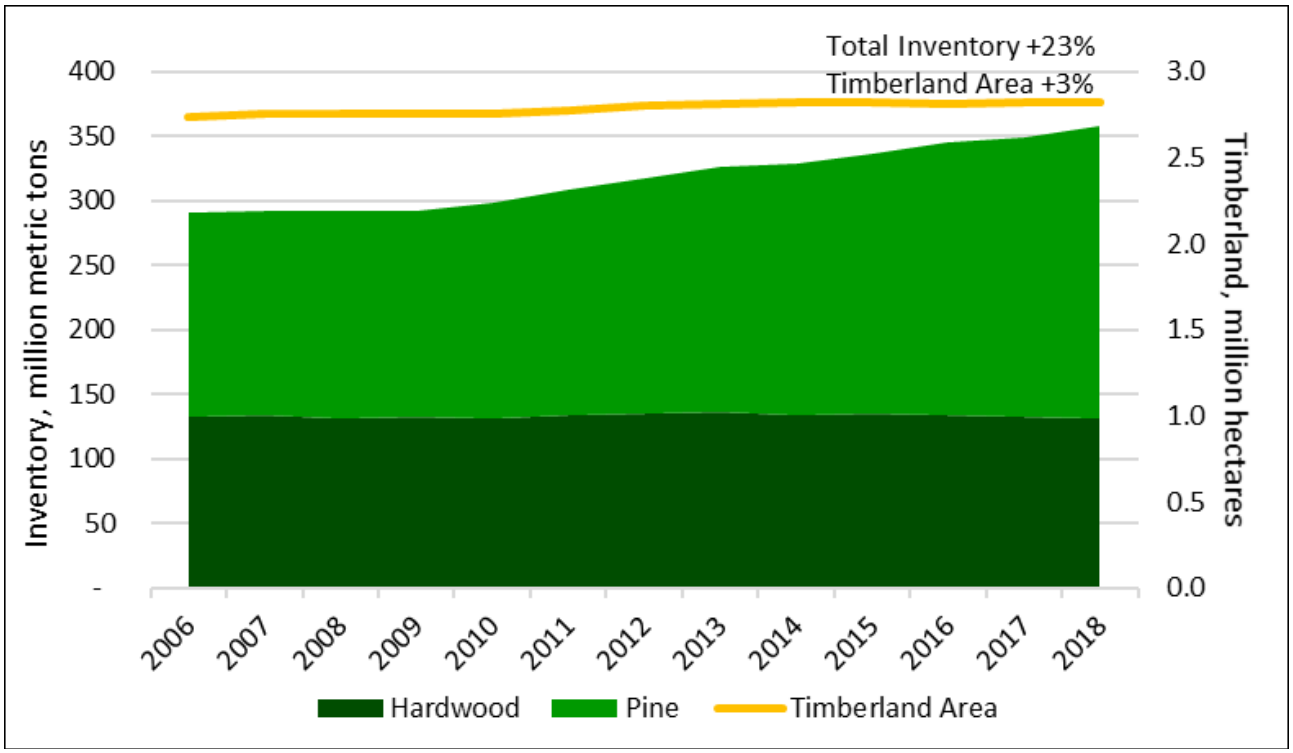
"Strong markets for forest products provide incentives for private landowners to keep their lands in forest cover (Wear 2013). This is particularly important across the longleaf range where recent forecasts of human population and income growth point toward increasing pressure in some locations to convert forest land to other uses (Wear 2013)[5]. 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[6]."

[4] 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.
[5] 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.
[6] Longleaf Alliance and NCASI. 2014 "Longleaf Pine: Sustainable Forest Management and the Restoration of a Species" brochure.

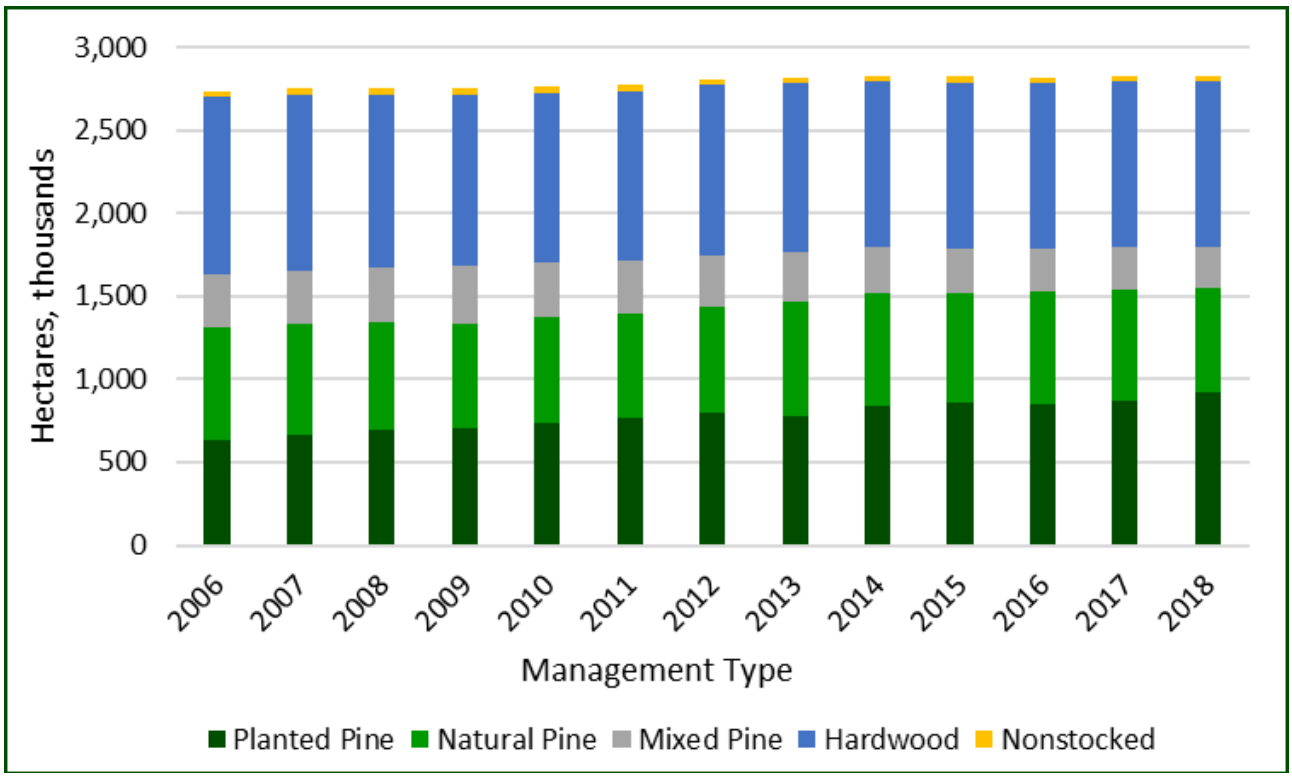
5.3 Detailed description of Supply Base

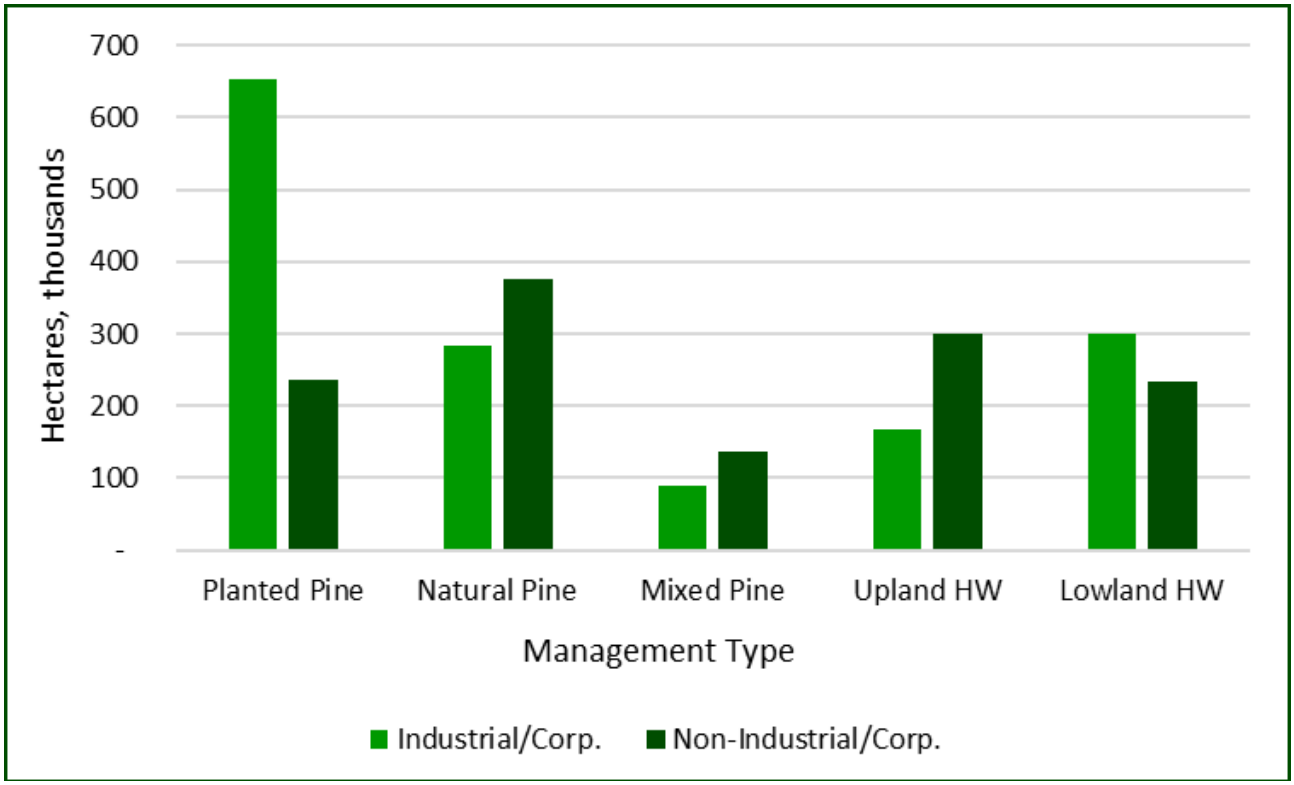
MBE's catchment is located in a unique geographic area with different land cover and terrain characteristics.

MBE is located on the border of the Mississippi Delta agricultural area and the heavily forested uplands to the west. Despite the high percentage of floodplain land in the supply shed, 42% of the acreage within the shed is upland forest. SYP, generally the most productive forest type in the region, is estimated to make up approximately 25% of the land cover, and it represents 44% of forest species in the area. Since 2006, total timberland area in the MBE catchment has increased by 3%. The increase of forested hectares is in the form of planted pine by 45%, and a decrease in natural pine and hardwood hectares by 7% in the same area.



State forestry websites feature detailed descriptions of forests and include noteworthy facts about each state's forests. Forest Inventory Analyses data is also publicly available, and provides many important parameters, including changes over time, in the states that supply MBE. Summaries of forest coverage near Morehouse are shown in the tables below.





SBP Feedstock Product Groups & Supplier Make-Up[7]

All Primary and Secondary feedstock used by MBE is SBP Compliant. [8]

MBE's supplier base is made up of timber dealers, logger-dealers, and managers of corporately owned timberland which provide primary feedstocks. In addition, residuals from sawmills and other wood manufacturing suppliers provide secondary feedstocks. Specific supplier lists and volumes by feedstock types are maintained and stringently reviewed by external auditors.

5.4 Chain of Custody system

The Chain of Custody System is managed by Richard Peberdy, VP, Sustainability. He is assisted by Kyla Cheynet, Sustainability Manager. All locations are part of a multi-site system managed by the Central Office. MBE is certified to the FSC®, SFI®, and PEFC™ Chain of Custody Standards.

Processing involves the receiving of roundwood and residual fiber by the pellet plant. The raw material is converted to chips and moisture is driven away for pelletizing. MBE uses the credit system at its BPs to determine claims for both SBP and FSC® certified pellets. All material received at MBE is covered under the Supply Base Evaluation. Following pelletizing at MBE, pellets are transported by rail to BRT. BRT receives

[7] 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.

[8] 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."

wood pellets from company owned plants and 3rd party plants. Wood pellets are then received, stored, and shipped.

Raw material is sourced as roundwood and residual fiber by MBE. During the start-up phase, most of the volume was received from a single forest management certified supplier. As operations ramped-up production to the designed run level, additional suppliers were added. Pellets received at BRT are from 3rd party suppliers and from company plants. Upon audit, MBE has purchased and sold 3rd party pellets. Future 3rd party pellet suppliers will be SBP certified. At MBE, raw material is received with a Fiber Purchase Agreement, Purchase Order, and Delivery Ticket which contains supplier information. The Purchase Order and Delivery Ticket contain the tract name, and state, county, and location of the tract. Volumes are entered electronically into the 3LOG System for receiving, inventory, and shipping. Traceability and segregation are provided by the 3LOG System. Sales and deliveries are internal transfers from MBE to BRT. BRT ships pellets to the parent company in England. The ownership of the pellets is transferred to the parent company upon loading of the vessel.

6 Evaluation process

6.1 Timing of evaluation activities

Lead Auditor Name	Tucker Watts

Site Name or Location:	*Baton Rouge Transit/Morehouse Bioenergy Plant/Central Office*	
Date and Time of Audit:	Monday, August 19 – Friday, August 23, 2019	
Audit Activity	**Items to Review / Actions**	**Approx. Start Time**
	Monday, August 19, 2019	
Opening meeting	Introductions, auditor review of audit scope, audit plan and intro/update to SBP standards and protocols, client description of organization	8:30 AM
Walkthrough of facility	Review of physical inputs and outputs, material receipt, processing, storage, credit account (if applicable), sale, and overall control	9:00 AM
Review of SBP Standard 4	Written procedures, work instructions, product group list, accounting system for receiving and shipping	9:45 AM
Review of SBP Standard 5	Discussion of database of GHG and profiling data	10:30 AM
Daily Summary	Summary of day – Discuss agenda for next day	12:00 PM
Travel to Monroe		1:00 PM
	Tuesday, August 20, 2019	
Daily Opening	Agenda Review – Morehouse Bioenergy Plant	8:00 AM
Review of SBP Standard 1	Field site reviews for Morehouse Bioenergy Plant (A total of 6 sites to be visited)	8:15 AM
Daily Summary	Summary of day – Discuss agenda for next day	4:30 PM
	Wednesday, August 21, 2019	
Daily Opening	Agenda Review – Morehouse Bioenergy Plant	8:00 AM
SBP STD 1	Complete SBE/SBP STD #1; Review areas of Specified Risk and Plans for Mitigation. Review Supplier Visits, Site Visits, Scale House observations and collection of scale ticket data.	8:15 AM
SBP STD 2	Complete SBR/SBP STD #2	10:00 AM
Walkthrough of facility	Review of physical inputs and outputs, processing, laboratory monitoring, storage, and overall control	11:00 AM
SBP STD 4	Chain of Custody	1:00 PM
Daily Summary	Summary of day – Discuss agenda for next day	4:30 PM
	Thursday, August 22, 2019	
Daily Opening	Agenda Review – Monroe Office	8:30 AM
SBP ST 5, ID5A, ID5B, & ID5C, 5D	Review of GHG data collection– SAR, SBP Profiling data, DTS (Purchasing, Processing, Shipments), Dynamic Batch Sustainability Data, material receipt	8:45 AM
Review of SBP Standard 1	Interview of secondary suppliers for Morehouse Bioenergy Plant (A total of 4 suppliers to be interviewed)	1:00 AM
Daily Summary	Summary of day – Discuss agenda for next day	4:30 PM

	Friday, August 23, 2019	
Daily Opening	Agenda Review – Monroe Office	8:30 AM
Closing meeting preparation	Auditor takes time to consolidate notes and review audit findings for presentation at closing meeting	11:00 AM
Closing meeting and review of findings	Convene with all relevant staff to summarize audit findings, review identified nonconformities, and discuss next steps	12:00 PM
End		

6.2 Description of evaluation activities

Surveillance and expansion of scope Audit:

The on-site Surveillance Audit included an audit of the Supply Base Evaluation, Documented Management System, Collection and Communication of Greenhouse Gas data, and Chain of Custody. Also included were a 2-day site tour, interview of 4 secondary suppliers, and visits to 6 procurement sites to evaluate MBE's management and monitoring system. Procurement and production processes at MBE, LBE, and ABE are similar, so some information reviewed during the audit of MBE is also applicable to LBE and ABE. Audit methods consisted of review of documentation, studies, assessments, surveys, websites, emails, databases and staff interviews. The site tour and visits were evaluated by review of documentation, monitoring results, observations, and interviews. One day was spent conducting field evaluations. One day was spent on the Supply Base Evaluation, Documented Management System, supplier interviews, and Chain of Custody. An additional day was spent at the Central Office reviewing the Greenhouse Gases. Critical control points were witnessed in all areas.

6.3 Process for consultation with stakeholders

Stakeholder Consultation by the CB: SCS relies on its Master Stakeholder List, which contains stakeholders that are identified by type, e.g. ENGO, Government/regulatory, Educational/Academic, Industry, Indigenous/Aboriginal/Tribal, etc… This list is categorized by country and state/province at the very least, and for this consultation was filtered to omit any stakeholders that were not geographically relevant to the certificate-holder/applicant's supply base. No stakeholder consultation was conducted for this audit by SCS.

7 Results

7.1 Main strengths and weaknesses

Strengths with respect to the BP's overall conformity include the diversity of sources used for the development of the SBE and the experience of the persons conducting the SBE. Members of the organization have been and continue to be involved with the development of the SBP Standards and their evolution. Within the development/management team there are many years of experience in the area of operation. The capture of energy and GHG data works well, is centralized in a database system and substantiated by appropriate evidence.

For identified weaknesses please refer to the non-conformities and observations section 10 in this report.

7.2 Rigour of Supply Base Evaluation

Rigor of the Supply Base Evaluation was sufficient to document the findings of low risk. Use of documented reports and assessments, in combination with local experts, personal knowledge, and stakeholder comments provided a multi-faceted approach for evaluation of each Indicator. The scope statement adequately describes the characteristics of the Supply Base and management systems.

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

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

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

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

7.3 Collection and Communication of Data

Richard Peberdy, VP, Sustainability and Kyla Cheynet, Sustainability Manager are responsible for collecting data on energy, moisture content, material movements and inventories and related records such as ledgers, and invoices from different departments of the organization and external suppliers. Data are centrally compiled in a master spreadsheet. This spreadsheet also contains all necessary calculations.

Manager of Sustainability and Sustainability Analyst are well versed in all requirements regarding data collection and reporting, and manage comprehensive databases with clearly laid out tables and calculations.

All records required during the audit were readily available and the numbers and calculations as reported in the SAR are conclusive and replicable.

7.4 Competency of involved personnel

The Supply Base Evaluation was a joint effort of internal and external expertise. Persons involved are very competent for the development and on-going monitoring of the Supply Base Evaluation. Internal team consists of professionals that have a long history and expertise of working in the Supply Base individually, as well as in groups and associations. Internal team members have been actively involved in the development of the SBP requirements.

7.5 Stakeholder feedback

No comments were received or came to the attention of SCS.

7.6 Preconditions

No preconditions were issued by the certification body.

8 Review of Company's Risk Assessments

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

SCS assessed risk for the Indicators by evaluating comments received during the stakeholder consultation conducted by both SCS and MBE, reviewing the means of verification MBE developed, interviews with relevant staff, and conducting on-site field audits of forest suppliers.

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

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

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

2.3.1	Low	Low
2.3.2	Low	Low

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

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

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

9 Review of Company's mitigation measures

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

2.1.2 - *The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities*.

2.2.3 - *The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state.*

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

2.4.1 - *The Biomass Producer has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest ecosystems are maintained or improved.*

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

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

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

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

<u>Late Successional Bottomland Hardwoods (LSBH)</u>

As MBE primarily sources Southern Yellow Pine, Late Successional Bottomland Hardwoods are mainly an issue for residual suppliers who use hardwoods and are proximate to LSBH areas. The areas that potentially have LSBH have been mapped by FSC and integrated into MBE's GIS system and RRA procedures. For residual suppliers, outreach and education will be the mitigation tool of choice. For primary suppliers, information is collected on forest type and species is collected for all harvests. If a forest tract is identified as having a high hardwood component, the site will be evaluated to determine if it is a LSBH tract. No fiber will

be sourced from harvests that endanger the health, vigour, and long-term persistence of these bottomland hardwood tracts. In addition, educational materials will be provided which will attempt to engage landowners, foresters, and loggers in conservation of this forest system.

Native Longleaf Pine Systems (NLPS)

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

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

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

Other Relevant Internal Procedures:

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

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

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

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

Drax Biomass is in the process of implementing the FSC Controlled Wood National Risk Assessment. Mitigation steps are being planned, implemented, and monitored annually.

10 Non-conformities and observations

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

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

NC number *1*	**NC Grading: Minor**
Standard & Requirement:	*SBP Standard 4, 5.2.5*
Description of Non-conformance and Related Evidence:	
PO for contract # 409-065, and CR19022 did not contain the Category of Origin and CoC #. Information in 3Log system was complete for Category of Origin and CoC #.	
Timeline for Conformance:	By the next surveillance audit, but no later than 12 monhts from report finalisation date
Evidence Provided by Company to close NC:	*Click or tap here to enter description provided by Company to close the NC.*
Findings for Evaluation of Evidence:	*Click or tap here to enter findings for evaluation of evidence by the auditor.*
NC Status:	Open

NC number *2*	**NC Grading: Observation**
Standard & Requirement:	*SBP Standard 1, 2.2.2*
Description of Non-conformance and Related Evidence:	
On 2 sites visited minor rutting was observed. There is an opportunity to improve harvest management by primary suppliers to better control minor impacts to soil quality.	
Timeline for Conformance:	Other Response is optional
Evidence Provided by Company to close NC:	*Click or tap here to enter description provided by Company to close the NC.*
Findings for Evaluation of Evidence:	*Click or tap here to enter findings for evaluation of evidence by the auditor.*
NC Status:	Open

11 Certification decision

Based on the auditor's recommendation and the Certification Body's quality review, the following certification decision is taken:	
Certification decision:	Certification approved
Certification decision by (name of the person):	Sebastian Häfele
Date of decision:	September 27, 2019
Other comments:	*Click or tap here to enter text.*