

Genesee Power Station

G-5310 North Dort Highway Flint,
Michigan 48505
(810) 785-4144

Fuel Procurement and Monitoring Plan

Initial Release: 12/1/1994

Current Revision: 13 – 12/12/2022

Table of Contents

- I. Scope & Purpose
 - II. Responsibilities and Relationship of Plan participants
 - III. Definitions
 - IV. Requirements of the ROP
 - V. Description of High-Quality Wood Waste to be Burned
 - Figure 1: Fuel Material Flow Diagram
 - VI. WWRF Inspection and sorting procedures and protocol used to eliminate Prohibited Materials and minimum non-wood and Unacceptable Wood Waste including Procedures for rejecting and/or removing Unacceptable wood Waste and Residue Materials
 - a. WWRF General Acceptance Policy
 - b. Rejected Load Criteria
 - c. WWRF Material Flow
 - Figure 2: WWRF Material Flow Activities and Quality Control Activity
 - 1. WWRF Gate Inspection
 - 2. Tipping Floor Inspection and Coarse Sort
 - 3. Screening
 - 4. Manual Sorting Station
 - 5. Process Equipment
 - 6. Chip Storage Inspection
 - 7. Handling of Residual Materials
 - 8. Residual Removal
 - 9. Personnel Training in Inspection Procedures
 - 10. WWRF Inspection
- VII. Supplier qualifications, processing, and inspection procedures for each supplier of Source Separated Wood Waste
- VIII. Auditing procedures including records of fuel specification, load identification, quality of load and fuel pile including odor minimization
 - a. Auditing Procedures Including Records of Fuel Specifications and Load Identification
 - b. Quality Control of Loads Grid Test.
 - i. Apparatus

Figure 3: Grid Test Inspection Grid and Test Bin

- ii. Procedure
- iii. Inspection
- iv. Calculations
- v. Wood Waste Fuel Rejection Criteria
- vi. Re-Inspection
- vii. Inspection Frequency
- viii. Records
- ix. Testing by the EGLE-AQD

c. Quality Control of Fuel Pile and Odor Minimization

Figure 4: Two Pile Fuel Management Sequence

IX. Procurement and Processing of Fuels under Rule 285

X. Tire Derived Fuel (TDF)

XI. Plan Revision History, Review and Approval

Figure 5: Plan Revision History

Figure 6: Annual Plan Review

Figure 7: Plan Approval

Appendix A: Protocol for Visually Determining Acceptability with the Fuel Quality Criteria

Appendix B: Wood Waste Sampling and Inspection Standard Data Form

Appendix C: Summary of Data: Inspection Record Log

Fuel Procurement and Monitoring Plan

I. Scope and Purpose

Genesee Power Station Limited Partnership (GPSLP) has herein established this Fuel Procurement and Monitoring Plan (as amended from time to time) (Plan) setting forth the inspection, sorting, processing, storage, testing and record keeping procedures for wood waste and other approved materials to be burned as fuels at Genesee Power Station (GPS or Facility). These procedures will be followed to ensure fuels delivered to GPS are in accordance with the requirements of GPSLP's Renewable Operating Permit (ROP) and other regulations that might apply. This Plan also delineates the responsibilities and relationships of the Plan participants.

II. Responsibilities and Relationships of Plan Participants

GPSLP is ultimately responsible for full compliance with this Plan and the ROP. GPSLP will reject any fuel materials delivered to GPS not in compliance with this Plan or its procedures and specifications.

Mid-Michigan Recycling, L.C. (MMR) is the exclusive wood waste fuel supplier to GPS pursuant to an Exclusive Wood Waste Delivery Services Agreement dated February 15, 1994 (as amended from time to time) wherein MMR has contractually committed to fully comply with the requirements of the Plan.

MMR and any fuel suppliers to MMR will be required to comply with the applicable provisions of the Plan. Suppliers who do not comply with the procedures outlined herein will have their materials rejected and may be denied further access to GPS or any MMR Wood Waste Recycling Facility (WWRF).

III. Definitions

- **Bone Dry Tons (BDT)** – the calculated weight of a material in a completely dry state without any water or moisture. Bone Dry Ton weight does not exist in the natural state of biomass or other fuel materials. It is useful in the absolute comparisons and compilations of biomass and other fuel materials that have varying moisture contents. It is calculated using the following equation: BDT equals Green Ton weight times (1 minus the percentage moisture content of the material as measured by a calibrated moisture analyzer).
- **Commingled Demolition Debris** – this material consists of mixed debris (including wood waste) resulting from the demolition of residential, commercial, and industrial structures. Before Commingled Demolition Debris can be delivered to GPS it must first be processed through a WWRF or similar facility approved by the Michigan

Department of Environment, Great Lakes, and Energy – Air Quality Division (EGLE-AQD) pursuant to Section VI of this Plan and upon receipt by GPS, must pass the Grid Test further described in Section VIII C. of this plan.

- **Facility** – see Genesee Power Station
- **Gaylord Boxes** - heavy duty corrugated shipping boxes securely attached to wood pallets.
- **Genesee Power Station (GPS) or Facility** – the 35 MWnet renewable cogeneration power plant located in Genesee County, Michigan.
- **Genesee Power Station Limited Partnership (GPSLP)** – a Delaware limited partnership formed to develop, construct, own and operate GPS.
- **Green Ton (GT)** – the “as received” weight of fuel including any water weight it may contain. This is the weight of fuels as measured on the truck scales at GPS or other certified scales. It is calculated by weighing a truck and trailer loaded with fuel, emptying the trailer, and re-weighing the truck and trailer. The difference in weight in tons equals the Green Tons of fuel.
- **Green Wood Waste**– this category of wood waste consists of wood in its natural state such as trees, branches, bark, clean wood chips and stumps that have not gone through a drying process. Green Wood Waste includes, but is not limited to, In-Forest Wood Waste, Land Clearing Wood Waste, Line-Clearance Wood Waste, Parks and Roads Wood Waste or any similar source of wood waste.
- **Grid Test** – the sampling and inspection protocol specified in Section VIII C of this Plan.
- **Heavily Painted Wood Material** - includes but is not limited to the following painted materials: doors, door casings, window frames, floor moldings, kitchen cabinets, stairways, and banisters.
- **High Quality Wood Waste** – this category of wood waste consists of Source Separated Wood Waste, Source Separated Wood Waste From Demolition and Comingled Demolition Debris as defined in this plan and meeting the specifications of wood waste of Part A of Appendix A of this Plan.
- **Industrial Wood Waste** – this category of wood waste consists of High Quality Wood Waste that has been dried by some means (air or kiln) and has been made into a product or is the residue remaining as part of the process in making the product. Industrial Wood Waste includes, but is not limited to, wood disposed of as used pallets, dunnage, packing crates, wood fiber materials used as part of packing

crates, Gaylord Boxes, wood residues from the manufacture of trusses, cabinets, trims, furniture, decks, etc. These materials shall not include wood waste bearing lead-based paint or wood preservatives.

- **In-Forest Wood Waste** – this category of wood waste consists of Green Wood Waste that is High Quality Wood Waste generated in the harvesting of timber for commercial logging or forest management.
- **Land Clearing Wood Waste** – this category of wood waste consists of Green Wood that is High Quality Wood Waste generated by land clearing for land development.
- **Line-Clearance Wood Waste** – this category of wood waste consists of Green Wood that is High Quality Wood Waste generated by tree service companies, municipalities, and utilities in the maintenance of utility lines and rights-of-way.
- **Materials Removable By Processing** – these materials include, but are not limited to, whole tires, white goods, metals, paper, cardboard (except corrugated cardboard associated with Gaylord Boxes), asphalt shingles, vinyl siding, plastic, plaster, dry wall, Heavily Painted Wood Materials, masonry materials, yard waste (such as leaves), roofing material, ceramic fixtures, plumbing, and electrical wiring.
- **Michigan Department of Environment, Great Lakes and Energy – Air Quality Division (EGLE - AQD)** – the governing authority of the State of Michigan responsible for, among other things, the approval of and enforcement of the ROP and this Plan.
- **Mid-Michigan Recycling, L.C. (MMR)** – a Michigan limited liability company that is the exclusive wood waste fuel supplier to GPS pursuant to an Exclusive Wood Waste Delivery Services Agreement dated February 15, 1994 (as amended from time to time).
- **New Construction Wood Waste** – this category of wood waste consists of High-Quality Wood Waste generated from new residential, commercial, and industrial construction projects.
- **Parks and Roads Wood Waste** – this category of wood waste consists of Green Wood that is High Quality Wood Waste generated by tree service companies and municipalities in the maintenance of parks and roads.
- **Preserved Wood** - includes wood impregnated with preservatives, including creosote, arsenic, chromate copper arsenate, and pentachlorophenol. Preserved Wood includes, but is not limited to, railroad ties, bridge timbers, marine pilings, and utility poles.

- **Prohibited Materials** - includes municipal solid waste, hazardous waste, medical waste, asbestos and pelletized paper.
- **Reclaim Pile** – the pile of fuel that is currently being fed into the boiler. This pile is comprised of the oldest fuel on GPS' property.
- **Renewable Operating Permit (ROP)** – a permit issued by the State of Michigan allowing GPS to emit up to a well-defined limit of air emissions. The ROP satisfies the requirements of Title V of the Clean Air Act.
- **Sawmill Wood Waste** – this category of wood waste consists of High-Quality Wood Waste generated by mills and primary wood products industries including hogged bark, trim slabs, planer shavings and sawdust.
- **Scrap Wood** – this category of wood waste consists of High Quality Wood Waste including but not limited to particle wood and wood laminates containing glues, binders or resins, plywood, pressed board, oriented strand board, or any other wood or wood product mixed with glue or filler and not treated with creosote or pentachlorophenol. Scrap Wood also includes woods from cabinet, furniture, and light manufacturing industries and other woods or wood products designated as scrap wood in the rules of the State of Michigan.
- **Source Separated Wood Waste** – this category of wood waste is a stream of wood waste that is separated at the source of generation for the conversion into processed raw wood. It originates as natural live wood or various other forms of wood that have been sorted and segregated from other materials and residues. Source Separated Wood Waste does not include the remaining other materials or residues after separation.
- **Source Separated Wood Waste from Demolition** – this category of wood waste is a stream of wood waste resulting from the systematic de-construction of residential, commercial, and industrial structures. Such wood waste must be source (or site) separated and stored in separate piles or containers. It must not contain significant amounts of contaminants such as Heavily Painted Wood Material, Preserved Wood, concrete, metal, glass, etc. Before being accepted as fuel at GPS this wood waste must be inspected and processed and compliant with the procedures described in Sections VII and VIII C. of this Plan.
- **Stack-Out Pile** – the pile of fuel that most recent deliveries are added to. This pile is typically comprised of the newest fuel on GPS' property. When the Reclaim Pile is depleted, the Stack-Out Pile is moved into position and becomes the new Reclaim Pile and a new Stack-Out Pile begins.

- **Tire Derived Fuel (TDF)** – this category of fuel consists of scrap tires that have been processed to be used as fuel and must meet the Specifications for Tire Derived Fuel detailed in Part B of Appendix A of this Plan.
- **Unacceptable Wood Waste** - wood wastes included in this category are Preserved Woods impregnated with preservatives, including without limitation, creosote, arsenic, chromated copper arsenate, and pentachlorophenol and inclusive of railroad ties, bridge timbers, marine pilings, and utility poles.
- **Wood Waste Recovery Facility (WWRF)** – a facility or site operated by MMR or other parties and approved by the EGLE-AQD as meeting all of the necessary requirements to properly inspect, sort and process Comingled Demolition Debris into High Quality Wood Waste deemed acceptable for delivery to GPS as a fuel.

IV. Requirements of the ROP

The ROP requires that only High-Quality Wood Waste, TDF, other approved fuels, or natural gas be used as fuel at GPS. The ROP permits the use of natural gas for boiler start-ups, boiler shutdowns or for limited flame stabilization. The ROP and this Plan describes what constitutes High Quality Wood Waste and what constitutes unacceptable fuel. Commingled Demolition Debris, Source Separated Wood Waste and Source Separated Wood Waste From Demolition each require specific procedures be followed prior to and upon delivery to GPS to ensure that all wood deliveries to GPS are High Quality Wood Wastes (See Sections VI, VII and VIII).

Section III 2 of the ROP requires that GPSLP shall not operate the boiler unless this [Plan] is utilized at all times to ensure that only [H]igh [Q]uality [W]ood [W]aste, as defined in the [Plan], is being burned in the boiler and to prevent unacceptable fuel from being burned in the boiler.

Furthermore, the ROP requires that the [Plan] shall, at a minimum, specify the following:

- a. A description of High-Quality Wood Waste to be burned.
- b. WWRF Inspection and sorting procedures and protocol used to eliminate Prohibited Materials and minimize non-wood and Unacceptable Wood Waste.
- c. WWRF procedures for rejecting and/or removing [U]nacceptable [W]ood [W]aste and residue materials.
- d. Supplier qualification, processing, and inspection procedures for each supplier of [S]ource [S]eparated [W]ood [W]aste.
- e. Auditing procedures including records of fuel specification, load identification, quality control of load and fuel pile.
- f. Odor minimization.

V. A Description of High-Quality Wood Waste to Be Burned

High Quality Wood Waste includes Source Separated Wood Waste meeting the specifications of wood waste outlined in Part A of Appendix A of this Plan. High

Quality Wood Waste includes but is not limited to:

- Green Wood Waste
- Sawmill Wood Waste
- New Construction Wood Waste
- Industrial Wood Waste
- Scrap Wood Waste

High Quality Wood Waste includes Source Separated Wood Waste From Demolition so long as it meets the specifications of wood waste outlined in Part A of Appendix A of this Plan and also passes the Grid Test when delivered to GPS (as further described in Section VIII C).

High Quality Wood Waste also includes the processed wood from Commingled Demolition Debris, however, this material must first be directed to a WWRF or other EGLE approved processing facility where the material will be subject to the inspection, sorting and processing identified in Section VI of this Plan. The wood waste delivered after processing at the WWRF or other EGLE approved processing facility must also meet the specifications of High Quality Wood Waste outlined in Part A of Appendix A of this Plan and must also pass the Grid Test when delivered to GPS (as further described in Section VIII C).

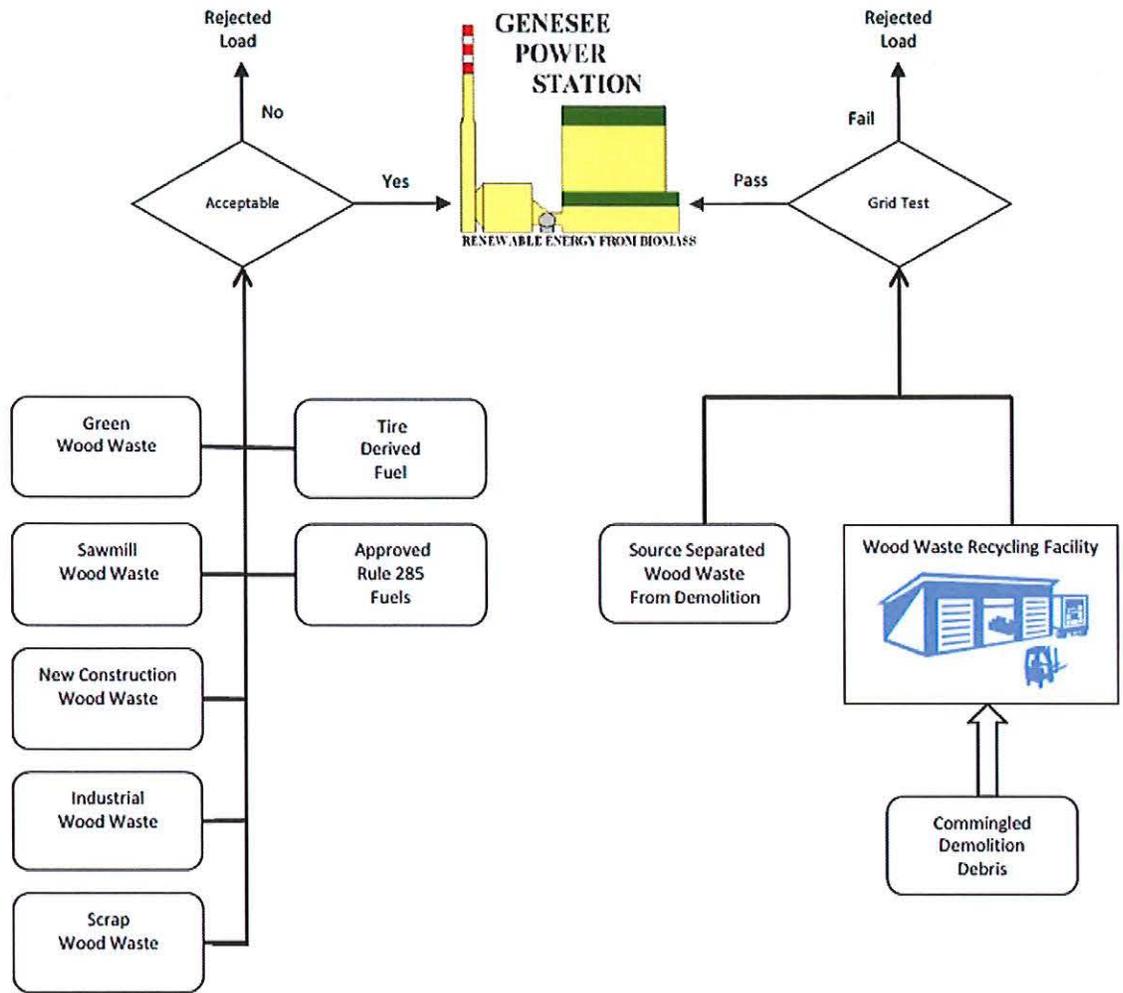


Figure 1: Fuel Material Flow Diagram

VI. WWRF inspection and sorting procedures and protocol used to eliminate Prohibited Materials and minimize non-wood and Unacceptable Wood Waste including procedures for rejecting and/or removing Unacceptable Wood Waste and residue materials

The inspection and sorting procedures and protocol used to eliminate Prohibited Materials and minimize non-wood and Unacceptable Wood Waste (including procedures for rejecting and/or removing Unacceptable Wood Waste and residue) are specifically applicable to Comingled Demolition Debris which must be processed at a WWRF or similar facility approved by the EGLE-AQD (so long as that facility follows the procedures implemented at a WWRF as outlined below or otherwise approved by the EGLE-AQD).

A. WWRF General Acceptance Policy

The final output of a WWRF is expected to be High Quality Wood Waste and will be considered such so long as the processed material meets the specifications of High Quality Wood Waste outlined in Part A of Appendix A of this Plan and so long as it passes the Grid Test when delivered to GPS (as further described in Section VIII C).

The WWRFs' processes improve the quality of the final fuel product by controlling the acceptance of Prohibited Materials and Unacceptable Wood Wastes and by using inspection and sorting processes to reduce the acceptance of Heavily Painted Wood Materials and non-wood materials. Heavy metals, such as lead, will be minimized by removing Heavily Painted Wood Materials before they are fed into the process equipment stream. Each WWRF will post a notice at its gate listing the types of Prohibited Materials and Unacceptable Wood Wastes that are not accepted at the WWRF. Each WWRF will identify and remove by inspection and sorting non- wood materials and Heavily Painted Wood Materials unloaded at the WWRF.

B. Rejected Load Criteria

To assure that Prohibited Materials and Unacceptable Wood Wastes are kept out of the final fuel product, loads received at each WWRF will be rejected in whole or in part if they fall into either category (i) or (ii) listed below.

(i) Prohibited Materials – If Prohibited Materials are detected or suspected on an incoming load it is rejected outright. If Prohibited Materials are identified as the load is tipped, all the material is promptly

reloaded and removed from the site. Prohibited Materials included in this category are municipal solid waste, hazardous waste, medical waste, asbestos, and pelletized paper.

(ii) Unacceptable Wood Wastes – These materials, if found at the tip floor in quantities that cannot be effectively removed on the tip floor or at the first manual sort station, will result in the rejection of the incoming load. Wood wastes included in this category are Preserved Woods including without limitation, creosote, arsenic, chromated copper arsenate, and pentachlorophenol and inclusive of railroad ties, bridge timbers, marine pilings, and utility poles.

(iii) Materials Removable by Processing – Heavily Painted Wood Materials and non-wood materials will be removed by processing. If a load is determined to consist more of this material than can be effectively removed in the processing system, the load will be rejected. These materials include, but are not limited to, whole tires, white goods, metals, paper, cardboard (except corrugated cardboard associated with Gaylord Boxes), asphalt shingles, vinyl siding, plastic, plaster and dry wall, Heavily Painted Wood Materials, masonry materials, yard waste (such as leaves), roofing material, ceramic fixtures, plumbing, and electrical wiring. Painted materials may be accepted for processing, if Heavily Painted Wood Materials, such as doors, door casings, window frames, floor moldings, kitchen cabinets, stairways, and banisters can be effectively removed by manual sorting and picking.

If a supplier is found to be in frequent violation of the WWRF acceptance policy, the supplier will be formally notified of actions required to remedy the situation. Continuing violations of the same nature or a material violation shall be just cause to prohibit the supplier from bringing loads to the WWRF.

Each hauler/supplier delivering the wood waste to the WWRF will sign a form certifying the name of the supplier of the load. On site record-keeping procedures will be conducted to identify each load received at the WWRF according to its quantity, composition, and origin by county. The WWRF operator will track the number of loads that are rejected from each supplier and the reasons such loads do not meet the specifications.

Ownership of material entering the WWRF remains with the supplier. It transfers to MMR or WWRF operator only after the material is formally accepted. Materials that are initially accepted, but ultimately fail to meet WWRF facility standards shall be removed from the processing line and

placed in containers for recycling or disposal at licensed landfills.

C. WWRF Material Flow

The main stations of each material flow activity at the WWRF and the corresponding quality control activity for each station are listed in Figure 2.

Material Flow Activity	Quality Control Activity
WWRF Gate	Initial load inspection Rejection of Prohibited Materials Rejection of Unacceptable Wood Wastes
Tipping Floor	Secondary load inspection while being tipped Material identification and segregation Rejection of Prohibited Materials Removal by sorting of Unacceptable Wood Wastes, Heavily Painted Wood, and non-wood materials
Trommel, Disk Screen or some other effective screening apparatus	Removal of fines or loose paint and material separation
Conveying/Sorting	Material removal and segregation Sorting by visual inspection and removal of material for disposal and recycling
Crusher	Initial sizing and material separation
Cross Belt Magnet	Removal of nails and ferrous metals
Water Bath or Air Knife Separator	Removal of fines, paper, plastic, and loose
Shredder or Grinder with a Magnetic Head Pulley	Final sizing and nail/ferrous removal
Chip Storage	Final quality inspection
Loading and Delivery to GPS	Grid Test at Genesee Power Station

Figure 2: WWRF Material Flow Activities and Quality Control Activity

1. WWRF Gate Inspection

A gate will be located at the entrance to each WWRF. A form will be presented to incoming vehicles which the vehicle driver must complete. The form includes the supplier name and is required to be signed by the driver. During the gate inspection the status of the supplier will be checked. If the supplier is on the list of suppliers formally notified of load quality violations the

vehicle driver shall be directed to leave the facility. If the supplier is not on the list of suppliers formally notified of load quality violations the material volume shall be determined and recorded on the form.

The load shall be visually inspected at the gate to determine if it contains any Prohibited Materials or Unacceptable Wood Wastes. If it is determined that the load contains any Prohibited Materials or significant quantities of Unacceptable Wood Wastes the load will be rejected, otherwise the vehicle will be directed to proceed to the tipping area.

Upon rejection of the incoming load the date and time of the rejection, the names of the supplier and driver, the point of origin by county and the reasons for the rejection will be recorded. The supplier is responsible for the rejected load and must promptly remove it from the WWRF. The WWRF operator will forward a letter to the supplier documenting the rejection of the load and the remedial action required of the supplier. All determinations of material quality are the responsibility of the WWRF operator, in their sole discretion.

2. Tipping Floor Inspection and Coarse Sort

Loads that pass the gate inspection will proceed to the tipping area. The truck will be directed to the appropriate staging area and the load will be tipped on the sealed slab.

The load will be examined as it is tipped for conformance to acceptance specifications and can be rejected at any point during tipping or after the material is spread on the tipping floor.

If material is unloaded onto the WWRF tipping floor and it is determined that the load falls within one or more of the rejection categories, the load will be rejected in its entirety and promptly and unconditionally loaded back into the delivery vehicle and removed from the site. The date and time of the rejection, the supplier and driver's names, the point of origin by county and the reasons for rejection shall be recorded. The WWRF operator will forward a letter to the supplier documenting the load rejection and the remedial action required of the supplier. Again, all determinations of material quality are the responsibility of the WWRF operator, in their sole discretion.

After the tip, a first manual pick of the load will commence. The target of this first manual pick is to identify and remove any large pieces of Heavily Painted Wood Waste, large pieces of non-wood material and large pieces of Unacceptable Wood Waste. Other materials falling within the facility residue limitations will be placed in designated areas either for disposal at an appropriate licensed landfill or for recycling. Any Prohibited Materials that are identified in this manual pick will also be separated and staged for appropriate disposal.

The tipping floor inspection serves as a front-end separation point which prevents any Prohibited Materials, large pieces or major amounts of Unacceptable Wood Waste and excessive amounts of Materials Removable by Processing from continuing in the processing system.

3. Screening

Note: While the equipment used in the wood processing system is subject to modification, the following steps 3, 4 and 5 are an example of the process as currently configured or planned.

Materials that have been accepted on the tipping floor will then be deposited onto a conveyor by a bucket loader, grapple, or bulldozer. Material on the conveyor will feed into a large rotating trommel, disk screen or some other effective screening apparatus to eliminate much of the fines and soil. Any fines or soil removed during this step will be staged for proper landfill disposal or recycling.

4. Manual Sorting Station

The screened material coming out of the screening process is deposited onto a second wide-belt conveyor where the second manual sort takes place. Any Prohibited Materials or Unacceptable Wood Wastes fitting the descriptions found in Sections VI B (i) or (ii) of this Plan identified by the sorters will be removed and staged for disposal at an appropriate licensed landfill or for appropriate recycling. Heavily Painted Wood Materials and medium sized pieces of non-combustibles will be removed at this inspection station. While the tipping floor first manual inspection serves as a good initial inspection and sort, this second manual sorting station will be more effective because

the sorters are able to detect smaller pieces of Prohibited materials, Unacceptable Wood Wastes or Heavily Painted Wood Material as they pass by on the wide-belt conveyor.

5. Process Equipment

After the sorting station the inspected material goes through the primary crusher to reduce it in size. During this process, paint on the wood material if there is any, is mostly flaked off. The material then goes onto a conveyor where it passes by a cross belt magnet to remove any nails or other ferrous materials. The conveyor deposits the material either into a water bath or past an air-knife separator where loose paint, additional fines, paper, plastic, etc. are removed from the material stream. The acceptable wood now goes through a secondary grinder or shredder for final sizing and exits past a magnetic head pulley where any remaining nails or ferrous materials are removed.

6. Chip Storage Inspection

Prior to being loaded into transport vehicles, the finished, processed wood waste fuel will be inspected once more by the WWRF operator. Any wood waste not conforming to the required specifications of High-Quality Wood Waste shall be segregated for reprocessing or disposal. The WWRF operator shall determine the root cause for the material not meeting the High-Quality Wood Waste specifications and take appropriate corrective actions.

7. Handling of Residual Materials

Residue materials at the WWRF are removed through both mechanical and manual methods. Prohibited Materials, Unacceptable Wood Wastes and Materials Removable by Processing that have been segregated on the tip floor during the initial inspection and sorting process will be removed and staged for appropriate disposal. Dirt, loose paint, and other fine material separated by the screening process will be removed and staged for shipment to a licensed landfill. Materials removed at the manual sorting platform will be staged for appropriate disposal or for recycling.

Non-ferrous metals (such as aluminum cans or stainless steel) will be visually identified at the picking station or detected by a

conveyor- mounted metal detector prior to the crusher/shredder/grinder feed. These metals will be removed from the conveyor manually or by an eddy-current magnet and staged for recycling. Discharged materials from the crusher passing under the cross-belt magnet to remove nails and small pieces of ferrous metal will be discharged via a conveyor into a disposal container designated for recycling.

Following the first magnetic separation, the wood chips pass through a water bath or air knife separator which removes non-wood materials (dirt, metal, etc.). This non-wood material is discharged via a conveyor to an area designated for recyclable material or to be disposed of at a licensed landfill.

8. Residual Removal

Residue disposal will be handled as follows:

- Metals and tires will be either sold or donated to acceptable facilities for recycling purposes.
- Broken concrete and brick will be recycled or used as road base material.
- Paper, plastic, shingles, carpeting white goods, and Heavily Painted Wood Materials will be recycled or sent to an appropriate landfill for disposal.
- Fines and soil will be sent to a landfill for disposal.

Slab drainage will be directed to a detention pit or tank used to settle suspended solids before the effluent enters the municipal sewer system.

9. Personnel training in inspection procedures

WWRF operators will be trained to recognize and identify Prohibited Materials, Unacceptable Wood Wastes, Materials Removable by Processing and Heavily Painted Wood Materials as part of their orientation training.

Periodic follow-up training and education will be provided to ensure a consistent and reliable level of quality control.

10. WWRF Inspection

GPSLP or EGLE-AQD representatives may enter the WWRF site and building at any time during normal operating hours to inspect and verify the inspection and operating procedures of the WWRF. Non-compliance with this Plan and any concerns or recommendations for corrective action from GPSLP or EGLE-AQD personnel will promptly be addressed by MMR for resolution or other suitable actions.

VII. Supplier qualification, processing, and inspection procedures for each supplier of Source Separated Wood Waste

Suppliers wishing to make deliveries of processed Source Separated Wood Waste directly to GPS will receive a written copy of the specifications for High Quality Wood Waste outlined in Part A of Appendix A of this Plan. Wood fuel not conforming to these specifications will not be accepted at GPS. Prior to accepting fuel from a supplier of processed Source Separated Wood Waste MMR must determine that the prospective Source Separated Wood Waste supplier is capable of source separating and processing material to meet the specifications of High Quality Wood Waste outlined in Part A of Appendix A of this Plan. In many instances making this determination will require that MMR conduct an on-site inspection of the Source Separated Wood Waste supplier's operations but this determination can also be made by other means (i.e. identification of source and nature of the material, recent history with a particular supplier, load inspections at GPS, etc.). If a supplier attempts to provide processed Source Separated Wood Waste with quality problems directly to GPS it will be rejected.

Source Separated Wood Waste From Demolition can be delivered directly to GPS so long as it meets the specifications of wood waste outlined in Part A of Appendix A of this Plan and also passes the Grid Test when delivered to GPS (as further described in Section VIII C). Records will be kept of the individual test results pursuant to Section VIII C 8 and any load not passing the test will be rejected.

Consistent with the above paragraphs, MMR must insure that any supplier of Source Separated Wood Waste From Demolition has the capability to and utilizes material handling procedures such that any processed material to be shipped directly to GPS meets the specifications of High Quality Wood Waste. Such procedures shall include the following:

- a. Wood material shall be separated and set apart from other materials and stored in specified separate container(s) or pile(s). This activity shall occur prior to grinding of the wood material.
- b. Wood to be processed shall be relatively free from contaminants

such as Heavily Painted Wood Material, Preserved Wood, Prohibited Materials, and concrete, metal glass, etc.

- c. All other materials not meeting the specifications for High Quality Wood Waste must be kept in containers or piles separate from the wood materials and properly recycled or disposed of in a licensed landfill by the supplier.
- d. Segregated wood material meeting the specification of High-Quality Wood Waste shall be processed using a grinder. Representatives of GPSLP, MMR or EGLE-AQD reserve the right to inspect any Source Separated Wood Waste supplier's site to verify that adequate inspection, separation and processing procedures are being followed to ensure that only High Quality Wood Waste is shipped directly to GPS.

VIII. Auditing procedures including records of fuel specification, load identification, quality control of load and fuel pile including odor minimization

A. Auditing Procedures Including Records of Fuel Specifications and Load Identification

Appendix 4 of the ROP states that "the permittee [GPSLP] shall use the following approved formats and procedures for the recordkeeping requirements" and that "alternative formats or procedures must be approved by the [EGLE] AQD District Supervisor".

4.1 Records for all incoming loads of wood waste fuel shall be in accordance with the [P]lan. These records shall include:

- 4.1.1 A record of the supplier/driver, net weight, fuel classification, time, date, and identification for each load delivered.
- 4.1.2 A record of the inspector, acceptance classification, and county of origin for each load.
- 4.1.3 Maintain as a record any correspondence to suppliers about material quality and/or about corrective action to meet quality standards.
- 4.1.4 A report should be written following a field inspection of any fuel supplier. The monitoring of any corrective or remedial action will be maintained in written form.
- 4.1.5 Daily Records of the wood storage pile size in BDT including the dates the piles were initiated and consumed.
- 4.1.6 Daily records of the wood fuel burned in BDT.
- 4.1.7 Monthly records of total deliveries, total consumption, and ending inventory of wood fuel in BDT.

- 4.1.8 Maintain as a record the completed [S]tandard [D]ata [S]heet used for each sampling and inspection activity as per Appendix A (of the Plan)
- 4.1.9 A monthly summary of data from each sampling and inspection activity completed per Appendix A [of the Plan].

Compliance with these recordkeeping requirements will be adhered to by both GPSLP and MMR. GPSLP and MMR will keep all records on file for a period of at least five years and, if requested, make them available to the EGLE-AQD as is required in Section VI. 8 of the ROP.

B. Quality Control of Loads

Controlling the quality of each load delivered to GPS is the responsibility of both GPSLP and MMR and is accomplished by strict adherence to the quality controls for all fuel deliveries specifically set out in Appendix A of this Plan. Diligent monitoring of each delivery to GPS as well as a constant focus on quality in the field (e.g. inspection visits to Source Separated Wood Waste suppliers and WWRFs by either GPSLP or MMR ensures that only High-Quality wood waste is accepted at GPS.

1. Apparatus

See Figure 3

a) Test Bin

A tray constructed of 16-gauge sheet metal with measurements 30" long, 30" wide, and 6" deep with an open top.

b) Inspection Grid

A cover for the test bin consisting of a square metal frame constructed of 1/8" by 1" by 1" steel angle with eighteen 1/16" diameter wires attached to frame at 3" centers spanning the frame in both directions resulting in one hundred 3" by 3" observation grids.

c) Gross Sample Container

A bin made of any material that can hold approximately five cubic feet of wood waste fuel.

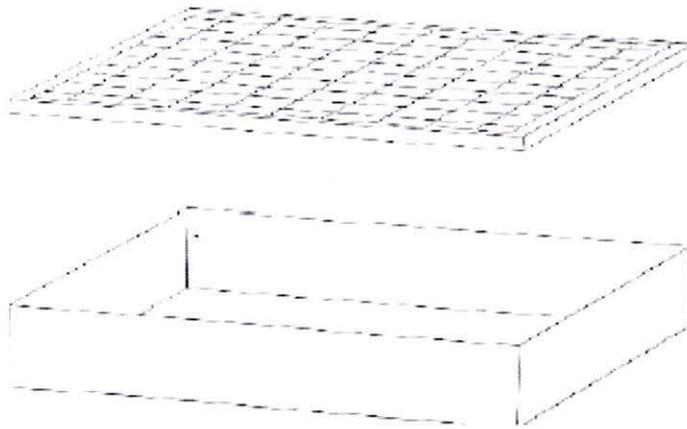


Figure 3: Grid Test Inspection Grid and Test Bin

2. Procedure

a) Collection of Core Sample

Subject to the frequency criteria in Section 7 below, an approximate three cubic foot core sample of wood waste will be taken at a minimum of 2 random locations from each load of Source Separated Wood Waste From Demolition and from each load of processed wood waste originating at a WWRF (or similar facility approved by the EGLE-AQD). If weather or operating conditions do not allow the sample to be taken from the platform at the weigh scale at GPS, the sample shall be taken at the truck tipping station promptly after the wood waste fuel has been unloaded.

b) Preparation of Core Sample

The core sample shall then be deposited into the gross sample container and mixed thoroughly. The test bin is then filled to within one half inch of its top lip with core sample material from the gross sample container. The inspection grid is then placed on top of the test bin.

3. Inspection

The following two types of non-conforming wood waste are the target of this inspection protocol.

- Incidental Non-wood Material – includes but is not limited to metals, paper, vinyl, textiles, linoleum, fiberglass, plastic, plaster and dry wall, masonry materials, non-wood yard waste, roofing materials, electrical wiring, and wood

impregnated with preservatives.

- Painted Wood – includes wood material which has traces of paint on it. Although most paint delivered to GPSLP is anticipated to be free of lead, unless GPSLP (or MMR) has documentation to demonstrate it is free of lead, the painted wood will be treated as though it may contain lead-based paint.

a) Visual Observations

The inspector shall visually observe and estimate the percentage of surface area occupied by painted wood or incidental non-wood material in every one hundred 3" x 3" grid squares. The inspector shall separately estimate the percentage of surface area of each grid square occupied by painted wood and incidental non-wood material. The amount of painted wood and incidental non-wood material in each grid square shall be rounded off to the nearest five percent. If there is any trace of paint on a piece of wood, the entire surface area where paint was observed shall be counted as painted wood.

b) Recording Results

The percent composition of each of the two types of non-conforming wood waste shall be recorded on a Wood Waste Sampling and inspection

Standard Data Form (Standard Data Form). A blank copy of this Standard Data Form is provided as Appendix B of this Plan. If no painted wood or incidental non-wood material is observed in a grid a zero shall be entered at the corresponding location on the Standard Data Form.

4. Calculations

The sum of all grid square observations for painted wood, divided by 100 shall be calculated and recorded on the Standard Data Form. Incidental non-wood material observations for the entire sample are calculated in the same manner. The separate calculations for painted wood and incidental non-wood material are recorded on the Standard Data Form and on an Inspection

Record Log. A blank copy of this log is provided as Appendix C of this Plan.

5. Wood Waste Fuel Rejection Criteria

GPSLP shall not except for fuel any load exceeding 3% painted wood, or 4.5% painted wood & incidental non-wood material as determined by this sampling and inspection protocol. GPSLP shall promptly notify MMR of any load rejected due to these criteria. A follow up written notification shall also be provided to MMR within five days. MMR shall follow-up with diagnostic and corrective actions to improve the quality of wood waste at the source responsible for the rejected load.

The cumulative monthly average of painted wood per inspection must not exceed 1.5%. The cumulative monthly average of painted wood & incidental non-wood material must not exceed 2.5%. If during any month these limits are exceeded, GPS is required to notify the EGLE-AQD. As part of its notification GPS will provide the percentage of painted wood or incidental non-wood material derived, the corrective action taken to improve the quality of wood waste fuel being processed at the WWRF, and its plans for a follow-up inspection of the source WWRF.

6. Re-Inspection

If there is a disagreement between the supplier and the person performing the test on behalf of GPSLP either a manager representing MMR or a manager representing GPSLP will be contacted to perform a re-inspection. The results of this re-inspection shall generally be the final say on whether that load of wood waste can be accepted or must be rejected. In some special circumstances a disputed sample can be placed in a sealed container and retained for re-inspection by a panel of representatives from EGLE-AQD, GPSLP and MMR but until that determination can be made the load in question must be segregated from all other materials on site. In these special circumstances the representative from EGLE-AQD will be the final authority.

7. Inspection Frequency

GPSLP shall, subject to the exception below, sample and

inspect every load of Source Separated Wood Waste From Demolition received at GPS and every load of processed High Quality Wood Waste delivered from a WWRF (or similar facility approved by the EGLE-AQD). If, over time, a supplier of Source Separated Wood Waste From Demolition or any WWRF (or similar facility approved by the EGLE-AQD) can demonstrate that the material they are delivering contains, on a rolling average basis over the last five deliveries, less than 1.4% painted wood and 2.4% for painted wood and incidental non-wood material then the frequency of sampling and inspection at GPS from that supplier or WWRF (or similar facility approved by the EGLE-AQD) may be reduced to every fourth load delivered from that specific source. If, at any time, this rolling average calculation exceeds the 1.4% and 2.4% respective results required above then the inspection frequency must return to every load for these sources of material.

8. Records

The completed Wood Waste Sampling and Standard Data Inspection Form used for each sampling activity and the Inspection Record Log shall be maintained at GPSLP. These records shall be made available for EGLE- AQD inspection upon request.

GPSLP will annually report to EGLE-AQD, a summary of the results, if any, of its sampling and inspection activities.

9. Testing by the EGLE -AQD

EGLE-AQD representatives may enter GPS at any time during normal operating hours to sample and inspect the wood waste fuel in accordance with the protocol described in this Plan. GPSLP shall provide the apparatus and collection tools to EGLE-AQD personnel for conducting the sampling and inspection protocol. GPSLP shall also provide assistance to EGLE-AQD personnel during the sampling procedure upon request.

D. Quality Control of Fuel Pile and Odor Minimization

Quality control of the fuel pile and odor minimization will be maintained by making certain that only High-Quality Wood Waste is accepted at GPS as further detailed in Part A of Appendix A of this

Plan. Additionally, even though a load may meet the fuel specifications criteria of Part A of Appendix A it may still be rejected due to obvious objectionable odors. If such an odorous load is delivered to GPS three options for handling the odorous load are available.

First, the odorous load may be rejected and promptly removed from GPS. Second, the odorous load may be promptly blended with clean chips that act as a bio-filter to mitigate the odor. Third, the odorous load may be pushed directly to the reclaimer to be quickly consumed by the boiler. The scale-house operator shall be promptly notified of loads determined to contain obvious objectionable odors. The scale-house operator shall contact the responsible supplier who will be required to take steps to minimize future loads containing obvious objectionable odors. Continuing violations of the same nature or a material violation shall be just cause to prohibit the supplier from bringing future loads to GPS.

Quality control of the fuel pile and odor minimization will also be mitigated at GPS by maintaining two fuel piles at GPS. Maintaining two piles (the Stack-Out Pile and the Reclaim Pile) will ensure a regular rotation of fuels on site thereby helping to prevent objectionable odors from developing on site. The Stack-Out Pile contains the newest fuel received on-site and the Reclaim Pile contains the older fuel inventory being fed to the boiler. The two-pile management system assures the first wood received is the first wood burned in the boiler. This two-pile inventory system is accomplished by maintaining a road width separation between the Reclaim Pile and the Stack-Out Pile. Except under emergency or abnormal situations, such as heavy rain and odor control, only wood from the Reclaim Pile is pushed into the boiler. When only two or three days-worth of fuel remains in the Reclaim Pile (based on normal boiler loading) the Stack-Out Pile is moved in behind what remains of the Reclaim Pile. This operation involves crosscutting the Stack-Out Pile as it is being moved to facilitate maximum blending of this material while it becomes the new Reclaim Pile.

Depending on the size of the Stack-Out Pile this effort can take two to three days. Upon initiating the move of the existing Stack-Out Pile into position to become the new Reclaim Pile a new Stack-Out Pile is started, and a new separation road established. This move is commonly called a pile turn. To better illustrate this technique, see the sequence of events in Figure 4 (four diagrams). The height of

the two piles will vary to minimize the footprint of the piles and help assist in eliminating odors from biological decomposition. In addition to reducing the rate of decomposition, this method of storage provides GPS with drier fuel improving its efficiency.

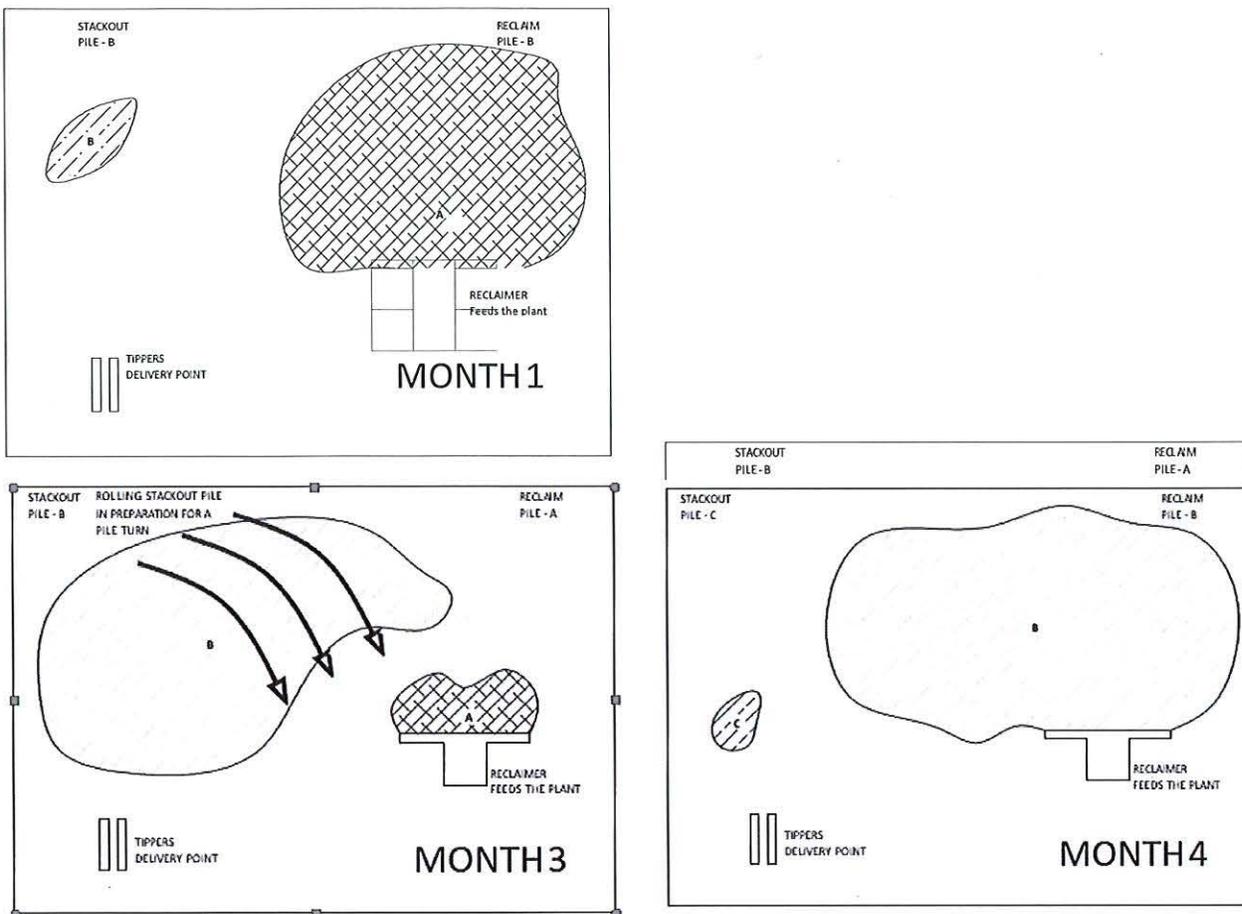


Figure 4: Two Pile Fuel Management Sequence

Notwithstanding the paragraph above, any time the total wood inventory in GPS' yard is 20,000 BDT or less, GPS may elect to maintain only one pile providing no odor issues occur. As soon as the wood inventory surpasses 20,000 BDT a new Stack-Out Pile will be formed of new deliveries.

Although not specifically required by a permit condition, GPS has identified a maximum amount of wood fuel storage on site at one time. However, it is fuel turn-over rate that has the most impact on minimizing potential odors. The specific amount of fuel stored on site is influenced by the moisture content of the fuel as well as predicted and actual

generation requirements, as well as seasonal fluctuations with transportation. GPS anticipates total wood pile storage of up to 55,000 BDT will accommodate these considerations.

The amount of fuel in the Stack - Out Pile and the amount of fuel in the Reclaim Pile is maintained and recorded daily. The start date of each new Stack-Out Pile and each wood fuel delivery being added to the Stack-Out Pile will be recorded by the scale house operator daily. The quantity of incoming wood fuel will be calculated in BDTs using the difference between the inbound and outbound readings on the truck scales and moisture content of the wood received. Wood samples submitted by the truck drivers will be analyzed for moisture by the scale house operator. The truck scales will be calibrated for accuracy as needed but not less than once every six months. Wood fuel pushed into the reclaimers and conveyed to the boiler will be weighed by belt scale totalizers within the plant and recorded by the plant operator daily. The belt scales are calibrated weekly by GPS' maintenance personnel to ensure accuracy. Once per twelve-hour shift, a wood sample will be taken from a location that represents the Reclaim Pile and delivered to the scale house for moisture analysis.

Likewise, once per twelve hour shifts the plant operator will retrieve a wood sample from the wood bin in the plant and analyze its moisture.

Quality control of the fuel pile and odor minimization will also be mitigated at GPS by burning the base of the fuel pile on a regular basis. The base of the fuel yard consists of six to eight inches of wood chips and is used to prevent bulldozer damage to the clay liner beneath. The base replacement may take place with the usual cycling of the Stack-Out Pile into the Reclaim Pile and include the entire footprint of the pile. The base will be replaced as often as necessary to control putrefied odors but not less than once a year. When a replacement of the base is necessary bulldozers or similar heavy equipment will be used to remove the base down to the clay grade liner and fresh wood chips will be added as a new base.

Tipping controls to limit fugitive dust will be utilized as appropriate.

IX. Procurement and Processing of Fuels under Rule 285

GPSLP may consider other materials to be used as fuel provided, they fall under the Rule 285 exemption from air permitting provided in the Michigan Air Pollution Control Rules and meet requirements of Rule 278. Examples include other biomass materials with similar characteristics as the wood waste fuel already

fired at the Facility. Such fuels shall be processed, handled, and monitored consistent with the procedures used for other High-Quality Wood Waste described in this Plan. Prior to procuring any fuels under Rule 285, GPSLP shall obtain a detailed description of the materials as well as analytical data to ensure that the materials will not cause any meaningful change in the quality and nature or any meaningful increase in the quantity of air emissions from the Facility. GPSLP shall inform the EGLE-AQD at least thirty days prior to the firing of these materials and provide support documentation to demonstrate that the fuel falls under the permit exemption given in Rule 285 as long as Rule 278 is also met.

X. Tire Derived Fuel (TDF)

TDF will be delivered to the site pre-processed per the TDF specifications of Part B of Appendix A. It will be stored and maintained in a separate pile or bunker from the wood. There will be adequate separation from the wood storage pile to allow for fire protection and minimize any risk that, if there were a fire in one pile or the other, the fire would not jump in either direction; TDF pile to wood pile or visa- versa. Because of the natural characteristics of TDF, odor and fugitive dust are not anticipated to be an issue.

TDF will be fed to the boiler via a calibrated metering station that feeds TDF directly onto GPS' fuel feed conveyor belts in a controlled manner. The maximum TDF inventory stored at GPS at any time will be 1,000 tons. This inventory allows for approximately two months of burning while allowing for availability of quality TDF at best available pricing.

XI. High Moisture Fuel Control

When fuel moisture is above 45% the Lead Control Room Operator (LCRO) will communicate with the Fuel Supply Operator (FSO) to try pushing fuel from other areas of the fuel pile. If this does not help lower fuel moisture the LCRO will have the FSO push 4' of fuel off the top of the fuel pile to try to get to drier fuel. If neither of these works to help control CO emissions the LCRO will reduce the Unit load to a reasonable load that allows emissions to stay within the limits of the ROP.

XII. Plan Revision History, Review and Approval

This written Plan will be reviewed by GPSLP at least annually. If any deficiencies are found in the written Plan, GPSLP is responsible for updating the Plan as needed. Updates are tracked in Figure 5 below and annual reviews are documented in Figure 6.

Figure 5: Plan Revision History

Revision	Date	Revision Description
1	12/1/1994	Initial release
2	1/17/1996	Plan reviewed – no changes
3	1/21/1998	Plan reviewed – no changes
4	10/20/1998	Plan reviewed – no changes
5	12/21/1998	Plan reviewed – no changes
6	4/19/1999	Plan reviewed – no changes
7	9/25/2006	Added animal bedding content
8	10/05/2012	Added Tire Derived Fuel and Source Separated Wood Waste from Demolition Updated, streamlined, and conformed the entire Plan to better meet the requirements of the ROP Reformatted
9	01/11/2016	Removed animal bedding content
10	12/17/2020	Reviewed and updated formatting
11	10/25/2021	Added Section XI for fuel pile moisture management
11	12/20/2021	Reviewed and updated MDEQ to EGLE, updated formatting.
12	5/27/2022	Reviewed and updated with minor word-smithing and new General Manager
13	12/12/2022	Increased amount of wood inventory to accommodate increased generation rates (45,000 to 55,000).

If no revision is necessary GPSLP shall annually certify here that a review of this written Plan has been made and that it sufficiently fulfills the requirements of the ROP granted to GPSLP.

Figure 6: Annual Plan Review

Date	Approved By	Title
December 2013	Kenneth A. DesJardins	Genesee Power Station General Manager
December 2014	Kenneth A. DesJardins	Genesee Power Station General Manager
December 2015	Kenneth A. DesJardins	Genesee Power Station General Manager
December 2016	Kenneth A. DesJardins	Genesee Power Station General Manager
December 2017	Kenneth A. DesJardins	Genesee Power Station General Manager
December 2018	Kenneth A. DesJardins	Genesee Power Station General Manager
December 2019	Kenneth A. DesJardins	Genesee Power Station General Manager
December 2020	Kenneth A. DesJardins	Genesee Power Station General Manager
December 2021	Kenneth A. DesJardins	Genesee Power Station General Manager
June 2021	Thomas M. Andreski	Genesee Power Station General Manager
May 2022	Thomas A. Andreski	Genesee Power Station General Manager

Figure 7: Plan Approval

Written By: R. J. Woodard	Signature:	Date:
Approved by: T. M. Andreski	Signature:	Date:

Wood Waste (and materials received under Rule 285)

Wood waste (and materials received under Rule 285) intended for use as a fuel at GPS will be received at GPS in trucks and unloaded by an operator initiated hydraulic truck dumper, a self-unloading truck, or a tipping truck. The GPS fuel supply operator (FSO) receiving each delivery is responsible for visually inspecting each load to determine whether the delivery meets the fuel quality criteria in Part A of this Appendix A as set forth below.

If wood waste, or in some instances fuels received under Rule 285, contained in a delivery is determined by the FSO to meet the specifications of Part A of this Appendix A the material can be bulldozed into the Stack-Out Pile. If the wood waste contained in the delivery is determined by the FSO not to meet the specifications of Part A of this Appendix A the material must be bulldozed into the area in the fuel yard designated as the reject area. Material in the reject area will either; 1) if possible, be cleaned by some means until it meets the specifications of Part A of this Appendix A and then can subsequently be bulldozed into the Stack-Out Pile; or 2) be rejected and reloaded for removal from the site.

In addition to these visual criteria for acceptance, deliveries of Source Separated Wood Waste From Demolition and deliveries from any WWRF (or similar facility approved by the EGLE-AQD) must also be tested according to the sampling and inspection protocol specified in the Grid Test (as further described in Section VIII C) to confirm that such wood wastes are High Quality Wood Wastes and acceptable as fuel at GPS. Wood wastes that do not meet all the additional testing criteria will be rejected by GPS.

Part A: Specifications of Wood Waste for Each Accepted Load

- Wood waste must be free of substances which are not allowed, pursuant to the ROP as may be amended from time-to-time.
- Wood waste must be free of Prohibited Materials and Unacceptable Wood Wastes or other materials which not allowed pursuant to its permits or would cause the ash to not be eligible for disposal in a Type 2 landfill if the materials were burned by GPS.
- Wood waste must be relatively free of rotten material which evidences a state of decomposition or putrefaction.
- Wood waste must be relatively free of noncombustible material including metal, stone, sand, ash, dirt, and other materials.
- Wood waste must be relatively free of painted material and paper or plastics.

Tire Derived Fuel (TDF)

If TDF contained in the delivery is determined by the FSO to meet the specifications of Part B of this Appendix A the material can be immediately unloaded into the TDF storage pile. If the TDF contained in the delivery is determined by the FSO not to meet the specifications of Part B the material must be rejected and reloaded for removal from the site.

Part B: Specifications of Tire Derived Fuel (TDF)

- TDF must be clean and free of dirt or other contaminants.
- TDF must be cut clean with minimal exposed wire.

Genesee Power Station

Date: _____ Accepted By: _____

Ticket No.: _____ Rejected By: _____

Supplier: _____

	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
Total										

Painted Wood →

← Incidental Non-wood Material

Painted Wood: _____ %

Incidental Non-Wood Material: _____ %

