312 Justice Avenue
Logan, WV 25601

Phone (304) 752-8320
Fax (304) 752-7488

August 8, 2016

Mr. William F. Durham, Director
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

RE: Greenbrier Minerals
Toney Fork Screen Plant
Facility ID: Pending

Dear Mr. Durham:

On behalf of Greenbrier Minerals, LLC, we submit the enclosed General Permit Construction Registration for the above-referenced facility. Included is a check in the amount of $1,500.00, which represents the submittal fee, and two additional permit copies for your review and approval.

The application addresses the construction and operation of a 600TPH coal screening plant to be located on the Toney Fork Surface Mine, Logan County, WV.

If additional information or clarification is needed, please contact me at the Logan address listed above or call 304-752-8320.

Sincerely,

Donna J. Toler
Air Quality Project Manager

donnatoler@suddenlink.net

GREENBRIER MINERALS, LLC

TONEY FORK
COAL SCREENING SYSTEM
ID NO. PENDING

GENERAL PERMIT REGISTRATION

INITIAL APPLICATION G10-D

DIVISION OF AIR QUALITY

Submittal Date: August 2016

TABLE OF CONTENTS

WVDAQ Registration Application

WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 - 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475 • *www.wvdep.org*

APPLICATION FOR GENERAL PERMIT REGISTRATION

CONSTRUCT, MODIFY, RELOCATE OR ADMINISTRATIVELY UPDATE

A STATIONARY SOURCE OF AIR POLLUTANTS

PLEASE CHECK ALL THAT APPLY (IF KNOWN):

■ **CONSTRUCTION** □ **MODIFICATION** □ **RELOCATION**
□ **ADMINISTRATIVE UPDATE** □ **AFTER-THE-FACT**

FOR AGENCY USE ONLY: *PLANT I.D. #* _____

PERMIT # _____ *PERMIT WRITER*: _____

CHECK WHICH TYPE OF GENERAL PERMIT REGISTRATION YOU ARE APPLYING FOR:

■ **G10-C –** Coal Preparation and Handling
□ **G20-B –** Hot Mix Asphalt
□ **G30-D –** Natural Gas Compressor Stations
□ **G33-A –** Class I Spark Ignition Internal Combustion Engine
□ **G35-A –** Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit)
□ **G40-C –** Nonmetallic Minerals Processing
□ **G50-B –** Concrete Batch
□ **G60-C** - Class II Emergency Generator
□ **G65-C –** Class I Emergency Generator

SECTION I. GENERAL INFORMATION

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):
GREENBRIER MINERALS, LLC

2. FEDERAL EMPLOYER ID NO. **(FEIN):**
26-1413283

3. APPLICANT'S MAILING ADDRESS:
PO BOX 446
MAN, WV 25635

4. IF APPLICANT IS A SUBSIDIARY CORPORATION, PLEASE PROVIDE THE NAME OF PARENT CORPORATION:
CORONADO COAL, LLC, 4425 ANJEAN ROAD, RUPERT, WV 25984

5. **WV BUSINESS REGISTRATION.** IS THE APPLICANT A RESIDENT OF THE STATE OF WEST VIRGINIA? ■ **YES** □ **NO**

➪ IF **YES,** PROVIDE A COPY OF THE **CERTIFICATE OF INCORPORATION** / **ORGANIZATION** / **LIMITED PARTNERSHIP** (ONE PAGE) INCLUDING ANY NAME CHANGE AMENDMENTS **OR** OTHER ***BUSINESS CERTIFICATE*** AS **ATTACHMENT A.**

➪ IF **NO,** PROVIDE A COPY OF THE **CERTIFICATE OF AUTHORITY** / **AUTHORITY OF L.L.C.** / **REGISTRATION** (ONE PAGE) INCLUDING ANY NAME CHANGE AMENDMENTS **OR** OTHER ***BUSINESS CERTIFICATE*** AS **ATTACHMENT A** .

SECTION II. FACILITY INFORMATION

7. TYPE OF PLANT OR FACILITY (STATIONARY SOURCE) TO BE CONSTRUCTED, MODIFIED, RELOCATED OR ADMINISTRATIVELY UPDATED (E.G., COAL PREPARATION PLANT, PRIMARY CRUSHER, ETC.) :
Coal Screening Plant

8. STANDARD INDUSTRIAL CLASSIFICATION (**SIC**) CODE FOR THE FACILITY:
1221 TONEY FORK SURFACE MINE

9A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY):	10A. LIST ALL CURRENT 45CSR13 AND 45CSR30 (TITLE V) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR EXISTING FACILITY ONLY):
PENDING	

PRIMARY OPERATING SITE INFORMATION

11A. NAME OF PRIMARY OPERATING SITE:	12A. MAILING ADDRESS OF PRIMARY OPERATING SITE:
Toney Fork Coal Screening Plant	**PO Box 446, Man, WV 25635**

13A. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE *PROPOSED SITE*?

■ **YES** ☐ **NO**

➪ IF **YES**, PLEASE EXPLAIN: **OWNER/OPERATOR**

➪ IF **NO**, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14A. ➪ FOR **MODIFICATIONS or ADMINISTRATIVE UPDATES,** AT AN EXISTING FACILITY, PLEASE PROVIDE DIRECTIONS TO THE *PRESENT LOCATION* OF THE FACILITY FROM THE NEAREST STATE ROAD;

➪ FOR **CONSTRUCTION OR RELOCATION PERMITS**, PLEASE PROVIDE DIRECTIONS TO *THE PROPOSED NEW SITE LOCATION* FROM THE NEAREST STATE ROAD.

From Charleston, follow US119S to Route 10 Intersection, proceed toward Man, turn left onto Buffalo Creek Road – proceed toward Saunders – turn left onto Toney Fork Road, entrance to surface mine of left – proceed to guard shack

INCLUDE A **MAP** AS **ATTACHMENT F**.

15A. NEAREST CITY OR TOWN:	16A. COUNTY:	
Lorado	**Logan**	
17A. UTM NORTHING (KM):	18A. UTM EASTING (KM):	19A. UTM ZONE:
4185289.63	**436258.38**	**17**

1ST *ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only)*

11B. NAME OF PRIMARY OPERATING SITE:	12B. MAILING ADDRESS OF PRIMARY OPERATING SITE:
_____	_____
_____	_____

13B. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE *PROPOSED SITE*?

☐ **YES** ☐ **NO**

➪ IF **YES**, PLEASE EXPLAIN: _____

_____

➪ IF **NO**, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14B. ➪ FOR **MODIFICATIONS or ADMINISTRATIVE UPDATES,** AT AN EXISTING FACILITY, PLEASE PROVIDE DIRECTIONS TO THE *PRESENT LOCATION* OF THE FACILITY FROM THE NEAREST STATE ROAD;

➪ FOR **CONSTRUCTION OR RELOCATION PERMITS**, PLEASE PROVIDE DIRECTIONS TO *THE PROPOSED NEW SITE LOCATION* FROM THE NEAREST STATE ROAD.

_____

_____

_____

INCLUDE A **MAP** AS **ATTACHMENT F**.

15B. NEAREST CITY OR TOWN:	16B. COUNTY:	
17B. UTM NORTHING (KM):	18B. UTM EASTING (KM):	19B. UTM ZONE:

2ND ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only)

11C. NAME OF PRIMARY OPERATING SITE:	12C. MAILING ADDRESS OF PRIMARY OPERATING SITE:
_____	_____
_____	_____

13C**.** DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE *PROPOSED SITE*?

☐ **YES** ☐ **NO**

➪ IF **YES**, PLEASE EXPLAIN: _____

_____

➪ IF **NO**, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14C. ➪ FOR **MODIFICATIONS or ADMINISTRATIVE UPDATES,** AT AN EXISTING FACILITY, PLEASE PROVIDE DIRECTIONS TO THE *PRESENT LOCATION* OF THE FACILITY FROM THE NEAREST STATE ROAD;

➪ FOR **CONSTRUCTION OR RELOCATION PERMITS**, PLEASE PROVIDE DIRECTIONS TO *THE PROPOSED NEW SITE LOCATION* FROM THE NEAREST STATE ROAD.

_____

_____

_____

INCLUDE A **MAP** AS **ATTACHMENT F**.

15C. NEAREST CITY OR TOWN:	16C. COUNTY:	
17C. UTM NORTHING (KM):	18C. UTM EASTING (KM):	19C. UTM ZONE:

20. PROVIDE THE DATE OF ANTICIPATED INSTALLATION OR CHANGE: **9/15/16** ➪ IF THIS IS AN **AFTER-THE-FACT** PERMIT APPLICATION, PROVIDE THE DATE UPON WHICH THE PROPOSED CHANGE DID HAPPEN: _____/_____/_____	21. DATE OF ANTICIPATED START- UP IF REGISTRATION IS GRANTED: **9/15/16**

22. PROVIDE MAXIMUM PROJECTED **OPERATING SCHEDULE** OF ACTIVITY/ ACTIVITIES OUTLINED IN THIS APPLICATION:

HOURS PER DAY **5** DAYS PER WEEK **5** WEEKS PER YEAR **20** PERCENTAGE OF OPERATION **100**

WEST VIRGINIA
STATE TAX DEPARTMENT

BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
GREENBRIER MINERALS, LLC
ANJEAN RD
RUPERT, WV 25984-0000

BUSINESS REGISTRATION ACCOUNT NUMBER: **1032-1821**

This certificate is issued on: 06/15/2011

This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

atL006 v.4
L1541364864

ATTACHMENT B

DETAILED PROCESS DESCRIPTION

The Toney Fork Surface Mine is located in a remote area of Buffalo Creek, Logan County, WV. The 2014 Powerscreen Warrior 1800 coal screening system will be used for direct-ship pit cleaned coal and may be moved and set up periodically to adjacent coal pits as material is uncovered.

The coal will be pit-cleaned and fed by front-end loader to bin BS-01(PW) @ TP-01(UD-PW); BS-01 will transfer to belt conveyor BC-01(NC) @ TP-02(TC-PE); coal from belt conveyor BC-01(NC) will transfer to screen SS-01(FE) @ TP-09(TC-FE). Screen material will then be sent to the under screen conveyor BC-02(FE) for distribution on any one of three belt conveyors BC-03(NC), BC-04(NC), or BC-05(NC) for transfer to the stockpiles OS-01(SW-WS), OS-02(SW-WS), and OS-03(SW-WS) @ TP-10(TC-PE) thru TP-15(TC-MDH). Stockpiles will then be loaded to truck and delivered to the appropriate loadout for delivery @ TP-16(LO-MDH). The screen will be housed in a fully enclosed screen box as depicted in the attached brochure.

Greenbrier Minerals proposes to install a portable water tank for use with the partially enclosed top end-loader fed bin. The feed bin will be used for coal transfer only and not storage.

ATTACHMENT C

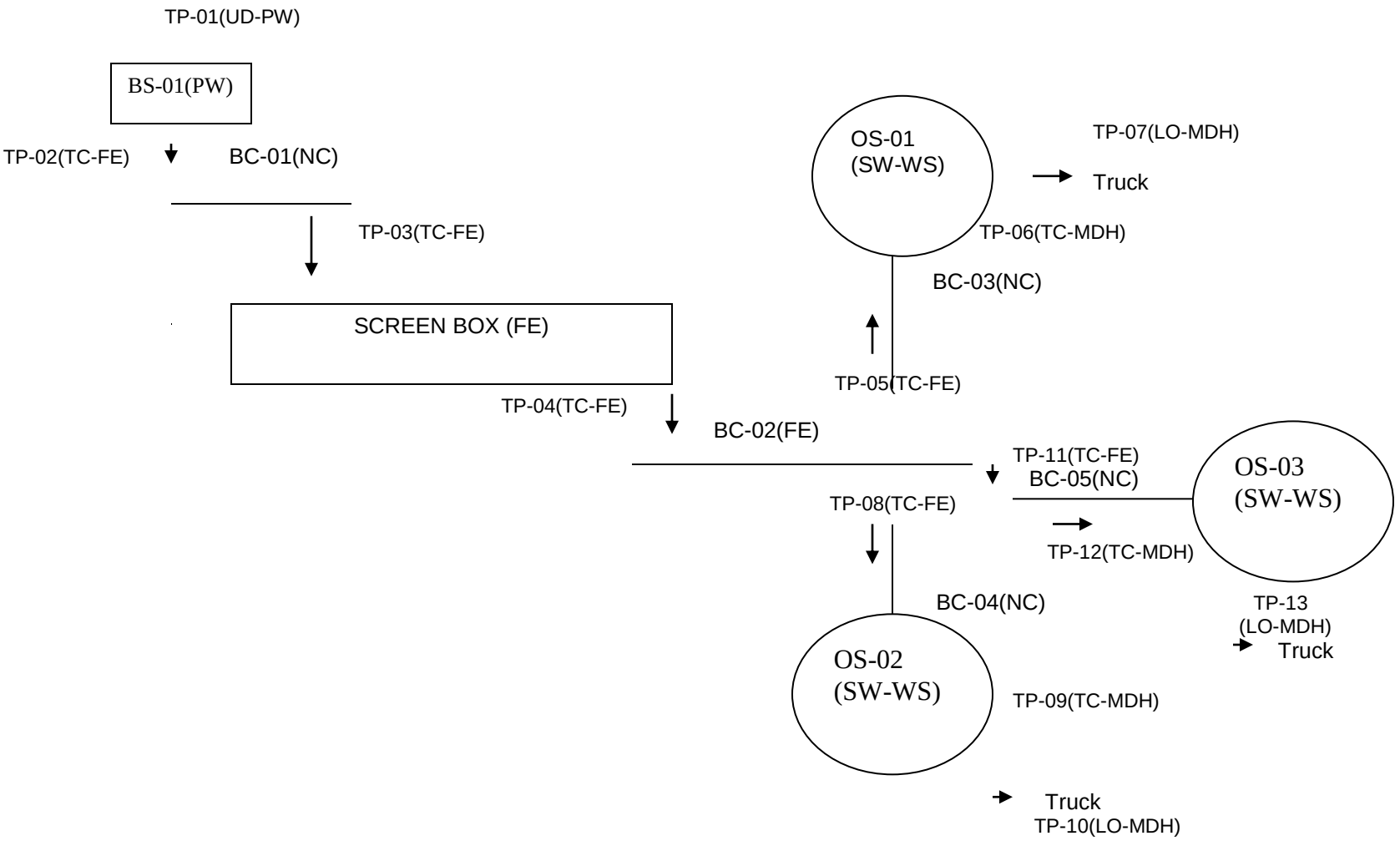
DESCRIPTION OF FUGITIVE EMISSIONS

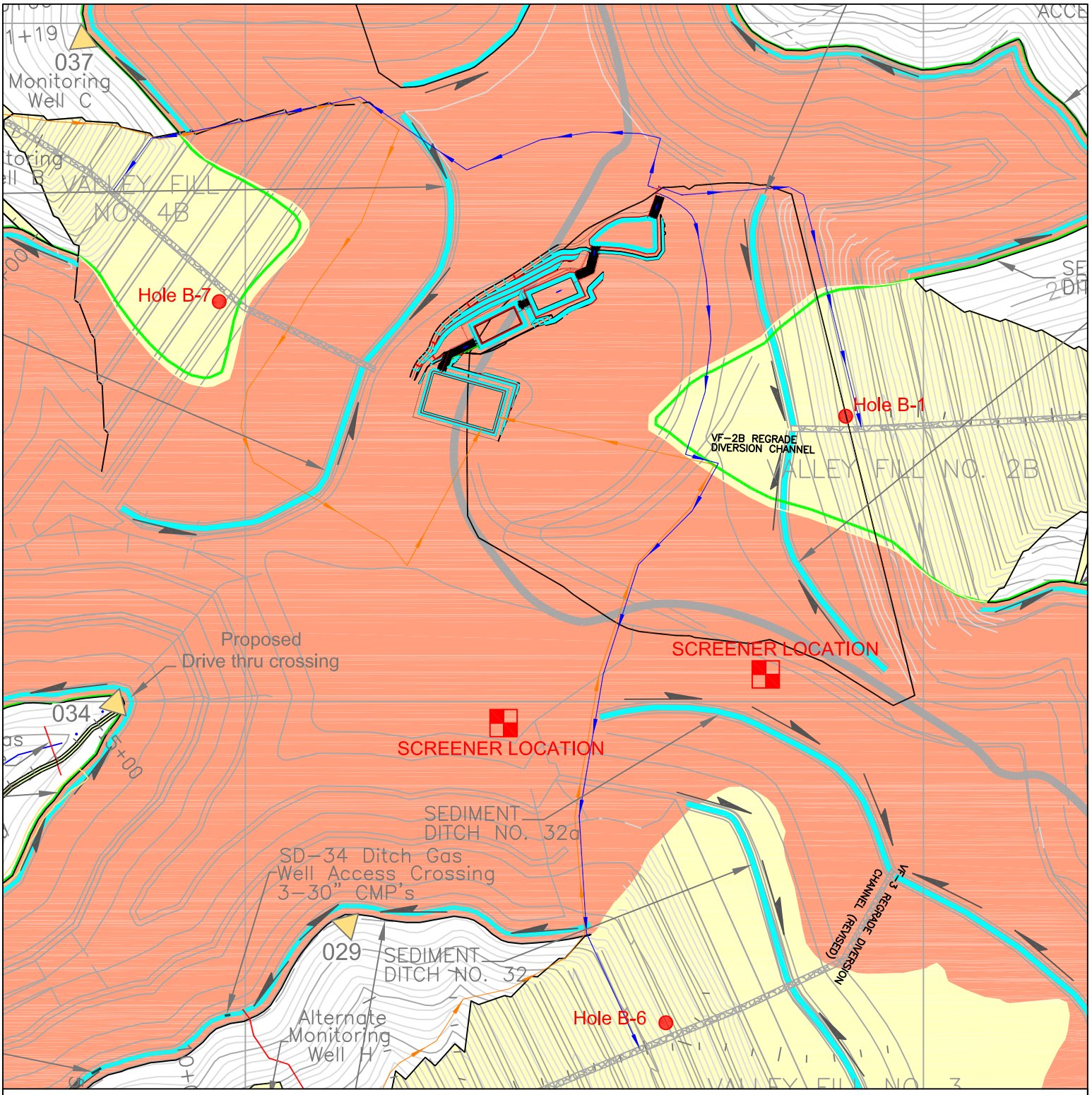
Potential sources of fugitive particulate emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on unpaved haulroads and work areas. The haulroads and work areas will be controlled by water truck in accordance with section E.6.c.i. of the General Permit. The stockpile areas will be controlled by water truck with pressurized pumps sufficient to control emissions. The water truck will be operated three times daily, and more as needed in dry periods.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present. New course rock base material will be added to unpaved haulroads as needed.

GREENBRIER MINERALS, LLC
TONEY FORK SCREENING PLANT
MATERIAL FLOW DIAGRAM

Coal Pit Area



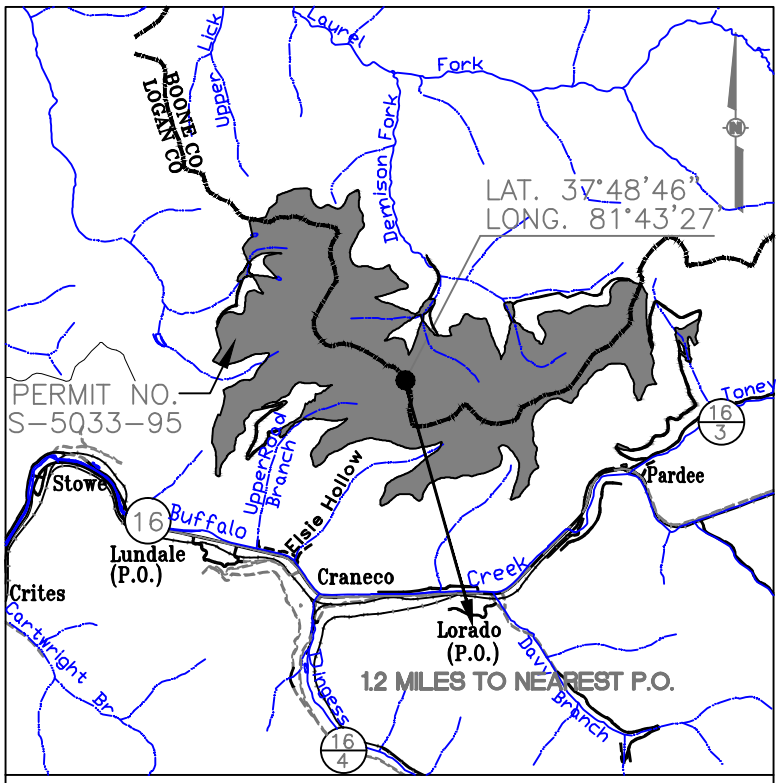


Toney Fork Screening Plant
Facility ID Pending
Site Plan

1 inch = 400 feet

GREENBRIER MINERALS
BUFFALO ENERGY DIVISION

P.O. Box 446 Man, West Virginia 25635
119 Rich Creek Road, Lyburn, West Virginia 25632



LOCATION MAP

PERMIT NO. S-5033-95

U.S.G.S. LORADO & AMHERSTDALE QUADRANGLES

LOGAN & TRIADELPHIA DISTRICTS OF LOGAN COUNTY

AND WASHINGTON DISTRICT OF BOONE COUNTY

SCALE: 1"=1 MILE

CRUSHING AFFECTED SOURCE SHEET

Source Identification Number[1]		**SS-01**					
Type of Crusher or Screen[2]		**DD**					
Date of Manufacture[3]		**2014**					
Maximum Throughput[4]	tons/hour	**600**					
	tons/year	**5,256,000**					
Material sized from/to:[5]		**4x0**					
Average Moisture Content (%)[6]		**5**					
Control Device ID Number[7]		**FE**					
Baghouse Stack Parameters[8]	height (ft)	**N/A**					
	diameter (ft)						
	volume (ACFM)						
	exit temp (°F)						
	UTM Coordinates						
Maximum Operating Schedule[9]	hours/day	**24**					
	days/year	**365**					
	hours/year	**8760**					
Percentage of Operation[10]	January-March	**25**					
	April-June	**25**					
	July-September	**25**					
	Oct-December	**25**					

1. Enter the appropriate Source Identification Number for each crusher and screen. For example, in the case of an operation which incorporates multiple crushers, the crushers should be designated CR-1, CR-2, CR-3 etc. beginning with the breaker or primary crusher. Multiple screens should be designated S-1, S-2, S-3 etc.
2. Describe types of crushers and screens using the following codes:

HM	Hammermill	SS	Stationary Screen
DR	Double Roll Crusher	SD	Single Deck Screen
BM	Ball Mill	DD	Double-Deck Screen
RB	Rotary Breaker	TD	Triple Deck Screen
JC	Jaw Crusher	OT	Other
GC	Gyratory Crusher		
OT	Other - Quadroll		

3. Enter the date that each crusher and screen was manufactured.
4. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
5. Describe the nominal material size reduction (e.g. +2"/ -_").
6. Enter the average percent moisture content of the material processed.
7. Enter the appropriate Control Device Identification Number for each crusher and screen. Refer to Table A - *Control Device Listing* and *Control Device Identification Number Instructions* in the *Reference Document* for Control Device ID prefixes and numbering.
8. Enter the appropriate stack parameters if a baghouse control device is used.
9. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.
10. Enter the estimated percentage of operation throughout the year for each crusher and screen.

CONVEYING AFFECTED SOURCE SHEET

Source ID Number[1]	Date of Manufacture[2]	Type of Material Handled[3]	Size of Material Handled[4]	Maximum Material Transfer Rate[5]		Average Moisture Content (%)[6]	Control Device [7]
				tons/hour	tons/year		
BC-01	**2014**	**Coal**	**4x0**	**600**	**5,256,000**	**5**	**NC**
BC-02	**2014**	**Coal**	**2x0**	**600**	**5,256,000**	**5**	**FE**
BC-03	**2014**	**Coal**	**-1 3/8**	**600**	**5,256,000**	**5**	**NC**
BC-04	**2014**	**Coal**	**2x0**	**600**	**5,256,000**	**5**	**NC**
BC-05	**2014**	**Coal**	**4x0**	**600**	**5,256,000**	**5**	**NC**

STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number[1]	**BS-01**					
Type of Material Stored[2]	**Coal**					
Average Moisture Content (%)[3]	**5**					
Maximum Yearly Storage Throughput (tons)[4]	**5,256,000**					
Maximum Storage Capacity (tons)[5]	**20**					
Maximum Base Area (ft^2)[6]						
Maximum Pile Height (ft)[7]						
Method of Material Load-in[8]	**FE**					
Load-in Control Device Identification Number[9]	**UD-PW**					
Storage Control Device Identification Number[9]	**SW-PW**					
Method of Material Load-out[8]	**SS**					
Load-out Control Device Identification Number[9]	**TC-FE**					

1. Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.
   - BS Bin or Storage Silo (full enclosure)
   - OS Open Stockpile
   - SF Stockpiles with wind fences
   - E3 Enclosure (three sided enclosure)
   - SB Storage Building (full enclosure)
   - OT Other
2. Describe the type of material stored or stockpiled (e.g. clean coal, raw coal, refuse, etc).
3. Enter the average percent moisture content of the stored material.
4. Enter the maximum yearly storage throughput for each storage activity.
5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
6. For stockpiles, enter the maximum stockpile base area.
7. For stockpiles, enter the maximum stockpile height.
8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:
   - CS Clamshell
   - FC Fixed Height Chute from Bins
   - FE Front Endloader
   - MC Mobile Conveyor/Stacker
   - UC Under-pile or Under-Bin Reclaim Conveyor
   - RC Rake or Bucket Reclaim Conveyor
   - SS Stationary Conveyor/Stacker
   - ST Stacking Tube
   - TC Telescoping Chute from Bins
   - TD Truck Dump
   - PC Pneumatic Conveyor/Stacker
   - OT Other

STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number[1]	**OS-01**	**OS-02**	**OS-03**		
Type of Material Stored[2]	**Coal**	**Coal**	**Coal**		
Average Moisture Content (%)[3]	**5**	**5**	**5**		
Maximum Yearly Storage Throughput (tons)[4]	**5,256,000**	**5,256,000**	**5,256,000**		
Maximum Storage Capacity (tons)[5]	**5,000**	**5,000**	**5,000**		
Maximum Base Area (ft^2)[6]	**8,869**	**8,869**	**8,869**		
Maximum Pile Height (ft)[7]	**20'**	**20'**	**20'**		
Method of Material Load-in[8]	**SS**	**SS**	**SS**		
Load-in Control Device Identification Number[9]	**TC-MDH**	**TC-MDH**	**TC-MDH**		
Storage Control Device Identification Number[9]	**SW-WS**	**SW-WS**	**SW-WS**		
Method of Material Load-out[8]	**EndLoader FE**	**EndLoader FE**	**EndLoader FE**		
Load-out Control Device Identification Number[9]	**LO-MDH**	**LO-MDH**	**LO-MDH**		

1. Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.
   - BS Bin or Storage Silo (full enclosure)
   - OS Open Stockpile
   - SF Stockpiles with wind fences
   - E3 Enclosure (three sided enclosure)
   - SB Storage Building (full enclosure)
   - **OT Other - Pressurized Water Truck**
2. Describe the type of material stored or stockpiled (e.g. clean coal, raw coal, refuse, etc).
3. Enter the average percent moisture content of the stored material.
4. Enter the maximum yearly storage throughput for each storage activity.
5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
6. For stockpiles, enter the maximum stockpile base area.
7. For stockpiles, enter the maximum stockpile height.
8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:
   - CS Clamshell
   - FC Fixed Height Chute from Bins
   - FE Front Endloader
   - MC Mobile Conveyor/Stacker
   - UC Under-pile or Under-Bin Reclaim Conveyor
   - RC Rake or Bucket Reclaim Conveyor
   - SS Stationary Conveyor/Stacker
   - ST Stacking Tube
   - TC Telescoping Chute from Bins
   - TD Truck Dump
   - PC Pneumatic Conveyor/Stacker
   - OT Other

ATTACHMENT H

BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET

Not applicable for this facility

Complete a Baghouse Air Pollution Control Device Sheet for each baghouse control device.

1. Baghouse Control Device Identification Number:
2. Manufacturer's name and model identification:
3. Number of compartments in baghouse:
4. Number of compartments online during normal operation and conditions:
5. Gas flow rate into baghouse: _____ ACFM @ _____ °F and _____ PSIA
6. Total cloth area: _____ ft^2
7. Operating air to cloth ratio: _____ ft/min
8. Filter media type: _____
9. Stabilized static pressure drop across baghouse: _____ inches H_2O
10. Baghouse operation is:

    ☐ Continuous ☐ Automatic ☐ Intermittent
11. Method used to clean bags:

    ☐ Shaker ☐ Pulse jet ☐ Reverse jet ☐ Other
12. Emission rate of particulate matter entering and exiting baghouse at maximum design operating conditions:

    Entering baghouse:_____ lb/hr and _____ grains/ACF

    Exiting baghouse: _____ lb/hr and _____ grains/ACF
13. Guaranteed minimum baghouse collection efficiency: _____ %
14. Provide a written description of the capture system (e.g. hooding and ductwork arrangement), size of ductwork and hoods and air volume, capacity and operating horsepower of fan:
15. Describe the method of disposal for the collected material:

    _____

GREENBRIER MINERALS - Toney Fork **Dan Roberts**
COAL SCREENING PLANT **ID No. PENDING** **8/03/16**
POWER SCREEN 1800

CRITERIA POLLUTANTS

AP-42 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-1 for Diesel

	82	**kW**
Caterpillar C4.4 Diesel Fuel Engine	**111**	**hp**
Max. Hours of Operation (5 hrs/day, 5 days/week, 20 weeks/year)	**500**	**hrs/year**
Heating Value for diesel	**19300**	**Btu/gal**

E (hourly) = Emission Factor (lb/hp-hr) * Horse Power (hp)
E (annual) = Emission Factor (lb/hp-hr) * Horse Power (hp) * Maximum Hours of Operation * 1 ton per 2000 lb

Pollutant		**Emission Factor (lb/hp-hr)**	**Emission Factor (lb/MMBtu)**	**Rating**	**lb/hour**	**TPY**
NOx	AP42	0.03100	4.41	D	3.4410	0.860
CO	AP42	0.00668	0.95	D	0.7415	0.185
SOx	AP42	0.00205	0.29	D	0.2276	0.057
PM/PM10	AP42	0.00220	0.31	D	0.2442	0.061
VOC	AP42	0.00247	0.35	D	0.2742	0.069

HAZARDOUS AIR POLLUTANTS

AP-42 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-2
45CSR30 Table 45-30A Hazardous Air Pollutants

Caterpillar C4.4 Diesel Fuel Engine	**111**	**hp**
aximum Hours of Operation (5 hrs/day, 5 days/week, 20 weeks/year)	**500**	**hours/year**
cation, based on EPA WebFIRE/AP-42 3.4-1 assumptions on diesel	**19300**	**Btu/lb**
	7.1	**lb/gal**
Heating Value for diesel	**134900**	**BTU/US gal**
Maximum diesel usage at 2200 rpm	**13.9**	**gal/hour**

E (hourly) = Emission Factor (lb/hp-hr) * Horse Power (hp)
E (annual) = Emission Factor (lb/hp-hr) * Horse Power (hp) * Maximum Hours of Operation * 1 ton per 2000 lb

CAS NO.		Emission Factor (lb/MMBtu)	Rating	lb/hour	TPY
71-43-2	Benzene	0.000933	E	0.0017	0.000437
108-88-3	Toluene	0.000409	E	0.0008	0.000192
	Xylenes	0.000285	E	0.0005	0.000134
	1,3-Butadiene	0.0000391	E	7E-05	1.83E-05
50-00-0	Formaldehyde	0.00118	E	0.0022	0.000553
	Acetaldehyde	0.000767	E	0.0014	0.00036
	Acrolein	0.0000925	E	0.0002	4.34E-05
91-20-3	Naphthalene	0.0000848	E	0.0002	3.98E-05
	Burning diesel fuel:		***Total HAPs***	**0.0071**	**0.001777**
				lb/hour	**TPY**

Fuel

EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS

						Registration Number (Pending				
	Potential Emissions (lbs/hr)					**Potential Emissions (tons/yr)**				
Source ID No.	**NO_X**	**CO**	**VOC**	**SO_2**	**PM_{10}**	**NO_X**	**CO**	**VOC**	**SO_2**	**PM_{10}**
CAT C4.4	**3.4410**	**0.7415**	**0.2742**	**0.2276**	**0.2442**	**0.860**	**0.185**	**0.069**	**0.057**	**0.061**
Total	**3.4410**	**0.7415**	**0.2742**	**0.2276**	**0.2442**	**0.860**	**0.185**	**0.069**	**0.057**	**0.061**

EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS

Registration Number (Agency Use) **Pending**

	Potential Emissions (lbs/hr)						Potential Emissions (tons/yr)					
Source ID No.	Benzene	Butadiene	Toluene	Xylenes	Acetakdehyde	Formalde-hyde	Benzene	Butadiene	Toluene	Xylenes	Acetakdehyde	Formalde-hyde
CAT C4.4	0.00175	7.3E-05	0.00077	0.00053	0.00144	0.00221	0.000437	1.83e-05	0.000192	0.000134	0.00036	0.000533
Source ID No.	Acrolein	Naphthalene					Acrolein	Naphthalene				
CAT C4.4	0.00017	0.00016					4.34E-05	3.98E-05				
TOTAL	HAPS 0.00711 lb/hr 0.001777 TPY											

INPUTS

Include all information for each emission source and transfer point as listed in the permit application.

Name of applicant: **Greenbrier Minerals**
Name of plant: **Toney Fork Plant**
Aug-16

1. CRUSHING AND SCREENING (including all primary and secondary crushers and screens)

1a. PRIMARY CRUSHING

Primary Crusher ID Number	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %

1b. SECONDARY AND TERTIARY CRUSHING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %

1c. SCREENING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %
SS-01	Pwerscreen Serial PID00123VDGE79068	600	5,256,000	FE	80

2. TRANSFER POINTS (including all conveyor transfer points, equipment transfer points etc.)

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.74	0.35
U =	Mean Wind Speed (mph)	7	

Transfer Point ID No.	Transfer Point Description Include ID Numbers of all conveyors, crushers, screens, stockpiles, etc. involved	Material Moisture Content %	Maximum Transfer Rate TPH	Maximum Transfer Rate TPY	Control Device ID Number	Control Efficiency %
TP01	Coal Pit to Bin BS-01	5	600	5,256,000	UD-PW	80
TP02	BS-01 to BC-01	5	600	5,256,000	TC-FE	80
TP03	BC-01 to SS-01	5	600	5,256,000	TC-FE	80
TP04	SS-01 to BC-02	5	600	5,256,000	TC-FE	80
TP05	BC-02 to BC-03	5	600	5,256,000	TC-FE	80
TP06	BC-03 to OS-01	5	600	5,256,000	TC-MDH	0
TP07	OS-01 to Truck	5	600	5,256,000	LO-MDH	0
TP08	BC-02 to BC-04	5	600	5,256,000	TC-FE	80
TP09	BC-04 to OS-02	5	600	5,256,000	TC-MDH	0
TP10	OS-02 to Truck	5	600	5,256,000	LO-MDH	0
TP11	BC-02 to BC-05	5	600	5,256,000	TC-FE	80
TP12	BC-05 to OS-03	5	600	5,256,000	TC-MDH	0
TP13	OS-03 to Truck	5	600	5,256,000	LO-MDH	0

3. WIND EROSION OF STOCKPILES (including all stockpiles of raw coal, clean coal, coal refuse, etc.)

p =	number of days per year with precipitation >0.01 inch	157
f =	percentage of time that the unobstructed wind speed exceeds 12 mph at the mean pile height	20

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
OS-01	Coal - Fines	5	8,869	SW-WS	75
OS-02	Coal - Product	5	8,869	SW-WS	75
OS-03	Coal - Oversize	5	8,869	SW-WS	75

4. UNPAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

s =	silt content of road surface material (%)	9
p =	number of days per year with precipitation >0.01 inch	157
M_{dry} =	surface material moisture content (%) - dry conditions	0.2

Item Number	Description	Number of wheels	Mean Vehicle Weight(tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1	Trucks out 5,256,000	18	45	15	2	13.3	######	HR-WS	70

5. INDUSTRIAL PAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

sL =	road surface silt loading, (g/ft^2)	1
P =	number of days per year with precipitation >0.01 inch	157

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %

EMISSIONS SUMMARY

Name of applicant: Greenbrier Minerals
Name of plant: Toney Fork Plant

Particulate Matter or PM (for 45CSR14 Major Source Determination)

	Uncontrolled PM		Controlled PM	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.17	0.75	0.04	0.19
Unpaved Haulroad Emissions	360.46	1,582.79	108.14	474.84
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**360.63**	**1,583.53**	**108.18**	**475.02**
POINT SOURCE EMISSIONS				
Equipment Emissions	60.00	262.80	12.00	52.56
Transfer Point Emissions	7.93	34.74	4.51	19.77
Point Source Emissions Total*	**67.93**	**297.54**	**16.51**	**72.33**
Facility Emissions Total	**428.56**	**1,881.07**	**124.70**	**547.36**

*Note: Point Source Total Controlled PM TPY emissions is used for 45CSR14 Major Source determination (see below)

***Facility Potential to Emit (PTE) (Baseline Emissions) = 72.33**

(Based on Point Source Total controlled PM TPY emissions from above) **ENTER ON LINE 26 OF APPLICATION**

Particulate Matter under 10 microns, or PM-10 (for 45CSR30 Major Source Determination)

	Uncontrolled PM-10		Controlled PM-10	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.08	0.35	0.02	0.09
Unpaved Haulroad Emissions	104.18	457.44	31.25	137.23
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**104.26**	**457.79**	**31.27**	**137.32**
POINT SOURCE EMISSIONS				
Equipment Emissions	28.20	123.52	5.64	24.70
Transfer Point Emissions	3.75	16.43	2.14	9.35
Point Source Emissions Total*	**31.95**	**139.95**	**7.78**	**34.06**
Facility Emissions Total	**136.21**	**597.73**	**39.05**	**171.37**

*Note: Point Source Total Controlled PM-10 TPY emissions is used for 45CSR30 Major Source determination

1. Emissions From CRUSHING AND SCREENING

1a. Primary Crushing

Primary Crusher ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1b. Secondary and Tertiary Crushing

Secondary & Tertiary Crusher ID	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1c. Screening

Screen ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
SS-01	60.000	262.800	12.000	52.560	28.200	123.516	5.640	24.703
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	60.000	262.800	12.000	52.560	28.200	123.516	5.640	24.703

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TOTAL	60.000	262.800	12.000	52.560	28.200	123.516	5.640	24.703

EMISSION FACTORS

source: Air Pollution Engineering Manual and References

(lb/ton of material throughput)

PM	
Primary Crushing	0.02
Tertiary Crushing	0.06
Screening	0.1

PM-10	
Primary Crushing	0.0094
Tertiary Crushing	0.0282
Screening	0.047

2. Emissions From TRANSFER POINTS

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TP01	0.610	2.672	0.122	0.534	0.289	1.264	0.058	0.253
TP02	0.610	2.672	0.122	0.534	0.289	1.264	0.058	0.253
TP03	0.610	2.672	0.122	0.534	0.289	1.264	0.058	0.253
TP04	0.610	2.672	0.122	0.534	0.289	1.264	0.058	0.253
TP05	0.610	2.672	0.122	0.534	0.289	1.264	0.058	0.253
TP06	0.610	2.672	0.610	2.672	0.289	1.264	0.289	1.264
TP07	0.610	2.672	0.610	2.672	0.289	1.264	0.289	1.264
TP08	0.610	2.672	0.122	0.534	0.289	1.264	0.058	0.253
TP09	0.610	2.672	0.610	2.672	0.289	1.264	0.289	1.264
TP10	0.610	2.672	0.610	2.672	0.289	1.264	0.289	1.264
TP11	0.610	2.672	0.122	0.534	0.289	1.264	0.058	0.253
TP12	0.610	2.672	0.610	2.672	0.289	1.264	0.289	1.264
TP13	0.610	2.672	0.610	2.672	0.289	1.264	0.289	1.264
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

2. Emissions From TRANSFER POINTS (continued)

Transfer	PM				PM-10			
Point	Uncontrolled		Controlled		Uncontrolled		Controlled	
ID No.	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	7.931	34.738	4.515	19.774	3.751	16.430	2.135	9.352

Source:
AP42, Fifth Edition, Revised 11/2006
13.2.4 Aggregate Handling and Storage Piles

Emissions From Batch Drop

E = k*(0.0032) * [(U/5)^1.3]/[(M/2)^1.4] = pounds/ton

Where:

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.74	0.35
U =	Mean Wind Speed (mph)		
M =	Material Moisture Content (%)		

Assumptions:

k - Particle size multiplier
For PM (< or equal to 30um) k = 0.74
For PM-10 (< or equal to 10um) k = 0.35

Emission Factor
For PM E= $I$88*(0.0032)*((((Inputs!$I$72)/5)^1.3)/(((Inputs!G78+0.000000001)/2)^1.4))
=lb/ton

For PM-10 E= $J$88*(0.0032)*((((Inputs!$I$72)/5)^1.3)/(((Inputs!G78+0.000000001)/2)^1.4))
=lb/ton

For lb/hr [lb/ton]*[ton/hr] = [lb/hr]

For Tons/year [lb/ton]*[ton/yr]*[ton/2000lb] = [ton/yr]

3. *Emissions From WIND EROSION OF STOCKPILES*

Stockpile ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
OS-01	0.057	0.248	0.014	0.062	0.027	0.117	0.007	0.029
OS-02	0.057	0.248	0.014	0.062	0.027	0.117	0.007	0.029
OS-03	0.057	0.248	0.014	0.062	0.027	0.117	0.007	0.029
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.170	0.745	0.043	0.186	0.080	0.350	0.020	0.088

Source:
Air Pollution Engineering Manual

Storage Pile Wind Erosion (Active Storage)

E = 1.7*[s/1.5]*[(365-p)/235]*[f/15] = (lb/day/acre)

Where:

s =	silt content of material
p =	number of days with >0.01 inch of precipitation per year
f =	percentage of time that the unobstructed wind speed
	exceeds 12 mph at the mean pile height

Emission Factors

For   PM E=(1.7)*((Inputs!F147)/1.5)*((365-Inputs!I139)/235)*((Inputs!I140)/15)

For   PM-10 E=0.47*(1.7)*((Inputs!F147)/1.5)*((365-Inputs!I139)/235)*((Inputs!I140)/15)

For lb/hr [lb/day/acre]*[day/24hr]*[base area of pile (acres)] = lb/hr

For Ton/yr [lb/day/acre]*[365day/yr]*[Ton/2000lb]*[base area of pile (acres)] = Ton/yr

4. Emissions From UNPAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	360.46	1582.79	108.14	474.84	104.18	457.44	31.25	137.23
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	360.46	1582.79	108.14	474.84	104.18	457.44	31.25	137.23

Source:
AP42, Fifth Edition, Revised 11/2006
13.2.2 Unpaved Roads

Emission Estimate For Unpaved Haulroads at Industrial Sites (equation 1)

E= k*((s/12)^a)*((W/3)^b) =lb/vmt

Where:

		PM	PM-10
k =	particle size multiplier	4.90	1.50
a =	empirical constant	0.7	0.9
b =	empirical constant	0.45	0.45

Emission Factors

For PM E= (($I$35)*(((Inputs!$I$163)/12)^($I$36))*(((Inputs!H171)/3)^$I$37))

For PM-10 E= (($J$35)*(((Inputs!$I$163)/12)^($J$36))*(((Inputs!H171)/3)^$J$37))

For lb/hr (lb/vmt)*(miles per trip)*(Max trips per hour)

For Ton/yr (lb/vmt)*(miles per trip)*(Max trips per year)*(1/2000)

Legal Advertisement

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Greenbrier Minerals, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Registration for a Coal Screening Plant System to be located on Toney Fork Surface Mine, Buffalo Creek Road near Lorado in Logan County, West Virginia. The facility coordinates are as follows: latitude 37.812778 and longitude –81.724167.

The applicant estimates the potential to discharge the following Regulated Air Pollutants from the diesel combustion engine will be: criteria pollutants for the engine is estimated to be: NOx 0.860 tons per year, CO 0.185 tons per year, VOC 0.069 tons per year, SOx 0.057 tons per year and PM10 0.061 tons per year. The potential to emit hazardous pollutants from the engine is estimated to be: Benzene 0.000437 tons per year, Toluene 0.000192 tons per year, Xylene 0.000134 tons per year, Acetaldehyde 0.00036 tons per year, and Formaldehyde 0.000553 tons per year.

The applicant estimates the potential to discharge the following Regulated Air Pollutants associated with the operation of the screening plant will be: facility particulate matter potential to emit baseline emissions of 72 tons per year, particulate matter less than 10 microns emissions total of 34 tons per year and particulate matter facility emissions total of 547 tons per year.

Startup of operation is planned to begin upon permit approval. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 10th day of August 2016

By: Greenbrier Minerals, LLC
Robert L. Cline
Authorized Agent
4425 Anjean Road
Rupert, WV 25984

ATTACHMENT K

ELECTRONIC SUBMITTAL DISC LOCATED IN ORIGINAL APPLICATION

SECTION IV. CERTIFICATION OF INFORMATION

This General Permit Registration Application shall be signed below by a Responsible Official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. A business may certify an Authorized Representative who shall have authority to bind the Corporation, Partnership, Limited Liability Company, Association, Joint Venture or Sole Proprietorship. Required records of daily throughput, hours of operation and maintenance, general correspondence, Emission Inventory, Certified Emission Statement, compliance certifications and all required notifications must be signed by a Responsible Official or an Authorized Representative. If a business wishes to certify an Authorized Representative, the official agreement below shall be checked off and the appropriate names and signatures entered. Any administratively incomplete or improperly signed or unsigned Registration Application will be returned to the applicant.

FOR A CORPORATION (domestic or foreign)

G I certify that I am a President, Vice President, Secretary, Treasurer or in charge of a principal business function of the corporation

FOR A PARTNERSHIP

G I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

■ I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

G I certify that I am the President or a member of the Board of Directors

FOR A JOINT VENTURE

G I certify that I am the President, General Partner or General Manager

FOR A SOLE PROPRIETORSHIP

G I certify that I am the Owner and Proprietor

G

Is an Authorized Representative and in that capacity shall represent the interest of the business (e.g., Corporation, Partnership, Limited Liability Company, Association Joint Venture or Sole Proprietorship) and may obligate and legally bind the business. If the business changes its Authorized Representative, a Responsible Official shall notify the Chief of the Office of Air Quality immediately, and/or,

I hereby certify that all information contained in this General Permit Registration Application and any supporting documents appended hereto is, to the best of my knowledge, true, accurate and complete, and that all reasonable efforts have been made to provide the most comprehensive information possible

Signature _____

(please use blue ink) Responsible Official Date

Name & Title ROBERT L. CLINE, AUTHORIZED AGENT

(please print or type)

Signature _____

(please use blue ink) Authorized Representative (if applicable) Date

Applicant's Name: GREENBRIER MINERALS, LLC

Phone 304-392-1000

Email: llavender@gscoal.com **(contact)**

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

PLEASE CHECK ALL ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:
Please See the appropriate reference document for an explanation of the attachments listed below.

- ■ **ATTACHMENT A : CURRENT BUSINESS CERTIFICATE**
- ■ **ATTACHMENT B: PROCESS DESCRIPTION**
- ■ **ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS**
- ■ **ATTACHMENT D: PROCESS FLOW DIAGRAM**
- ■ **ATTACHMENT E: PLOT PLAN**
- ■ **ATTACHMENT F: AREA MAP**
- ■ **ATTACHMENT G: AFFECTED SOURCE SHEETS**
- ■ **ATTACHMENT H: BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET**
- ■ **ATTACHMENT I: EMISSIONS CALCULATIONS**
- ■ **ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT**
- ■ **ATTACHMENT K: ELECTRONIC SUBMITTAL DISKETTE**
- ■ **CERTIFICATION OF INFORMATION**
- ■ **APPLICATION FEE**

PLEASE MAIL AN ORIGINAL AND TWO COPIES OF THE COMPLETE GENERAL PERMIT REGISTRATION APPLICATION WITH THE SIGNATURE(S) TO THE DAQ PERMITTING SECTION AT THE ADDRESS SHOWN ON THE FRONT PAGE. PLEASE DO NOT FAX PERMIT APPLICATIONS. FOR QUESTIONS REGARDING APPLICATIONS OR WEST VIRGINIA AIR POLLUTION RULES AND REGULATIONS PLEASE CALL (304) 926-3727.

ENGINE DATA SHEET

Source Identification Number[1]		E1					
Engine Manufacturer and Model		Cat 4.4(Serial Number 44806883)					
Manufacturer's Rated bhp/rpm		111/2200					
Source Status[2]		A/F					
Date Installed/Modified/Removed (Month/Year)[3]		Sept 2016					
Engine Manufactured/Reconstruction Date[4]		2014					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No)[5]		YES					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No)[6]		No					
Engine, Fuel and Combustion Data	Engine Type	4 Stroke					
	APCD Type[8]	N/A					
	Fuel Type[9]	Diesel					
	H_2S (gr/100 scf)	N/A					
	Operating bhp/rpm	2200					
	BSFC (Btu/bhp-hr)	N/A					
	Fuel throughput (ft^3/hr)	2.57 GPH					
	Fuel throughput ($MMft^3$/yr)	1285 GPY					
	Operation (hrs/yr)	500					
Reference[10]	Potential Emissions[11]	lbs/hr	tons/yr				
	NO_X	3.4410	0.860				
	CO	0.7415	0.185				
	VOC	0.2742	0.069				
	SO_2	0.2276	0.057				
	PM_{10}	0.2442	0.061				
	Formaldehyde	0.00221	0.000553				

1. Enter the appropriate Source Identification Number for each reciprocating internal combustion compressor/generator engine located at the facility. Multiple compressor engines should be designated CE-1, CE-2, CE-3 etc. Emergency Generator engines should be designated EG-1, EG-2, EG-3 etc. If more than three (3) engines exist, please use additional sheets.

2. Enter the Source Status using the following codes:

NS	Construction of New Source (installation)	ES	Existing Source
MS	Modification of Existing Source	RS	Removal of Source

3. Enter the date (or anticipated date) of the engine's installation (construction of source), modification or removal.

4. Enter the date that the engine was manufactured, modified or reconstructed.

5. Is the engine a certified stationary compression ignition internal combustion engine according to 40CFR60 Subpart IIII. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4210 as appropriate.

   Provide a manufacturer's data sheet for all engines being registered.

6. Is the engine a certified stationary spark ignition internal combustion engine according to 40CFR60 Subpart JJJJ. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4243a(2)(i) through (iii), as appropriate.

   Provide a manufacturer's data sheet for all engines being registered.

7. Enter the Engine Type designation(s) using the following codes:

LB2S	Lean Burn Two Stroke	RB4S	Rich Burn Four Stroke
LB4S	Lean Burn Four Stroke		

8. Enter the Air Pollution Control Device (APCD) type designation(s) using the following codes:

A/F	Air/Fuel Ratio	IR	Ignition Retard
HEIS	High Energy Ignition System	SIPC	Screw-in Precombustion Chambers
PSC	Prestratified Charge	LEC	Low Emission Combustion
NSCR	Rich Burn & Non-Selective Catalytic Reduction	SCR	Lean Burn & Selective Catalytic Reduction

9. Enter the Fuel Type using the following codes:

PQ	Pipeline Quality Natural Gas	RG	Raw Natural Gas
2FO	#2 Fuel Oil	LPG	Liquid Propane Gas

10. Enter the Potential Emissions Data Reference designation using the following codes. Attach all referenced data to this *Compressor/Generator Data Sheet(s)*.

MD	Manufacturer's Data	AP	AP-42	
GR	GRI-HAPCalc™	OT	Other _____	(please list)

11. Enter each engine's Potential to Emit (PTE) for the listed regulated pollutants in pounds per hour and tons per year. PTE shall be calculated at manufacturer's rated brake horsepower and may reflect reduction efficiencies of listed Air Pollution Control Devices. Emergency generator engines may use 500 hours of operation when calculating PTE. PTE data from this data sheet shall be incorporated in the *Emissions Summary Sheet*.

STORAGE TANK DATA SHEET

Source ID #[1]	Status[2]	Content[3]	Volume[4]	Dia[5]	Throughput[6]	Orientation[7]	Liquid Height[8]
T1	Exist	Diesel	1,000	4	8,000	HORZ	

1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the facility. Tanks should be designated T01, T02, T03, etc.
2. Enter storage tank Status using the following:

   EXIST Existing Equipment NEW Installation of New Equipment
   REM Equipment Removed
3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.
4. Enter storage tank volume in gallons.
5. Enter storage tank diameter in feet.
6. Enter storage tank throughput in gallons per year.
7. Enter storage tank orientation using the following:

   VERT Vertical Tank HORZ Horizontal Tank
8. Enter storage tank average liquid height in feet.

EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS

						Registration Number (Agency Use) **G10-D**				
	Potential Emissions (lbs/hr)					**Potential Emissions (tons/yr)**				
Source ID No.	**NO_X**	**CO**	**VOC**	**SO_2**	**PM_{10}**	**NO_X**	**CO**	**VOC**	**SO_2**	**PM_{10}**
Transfer Points					**2.14**					**9.35**
Crush/Screen					**5.64**					**24.70**
Stockpiles					**0.02**					**0.09**
Haulroads					**31.25**					**137.23**
				Total	**39.05**				**Total**	**171.37**
CAT C4.4	**3.4410**	**0.7415**	**0.2742**	**0.2276**	**0.2442**	**0.860**	**0.185**	**0.069**	**0.057**	**0.061**

****NOTE – GENERATOR EMISSIONS ARE UNCONTROLLED**

EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS

							Registration Number (Agency Use) **G10-D**					
	Potential Emissions (lbs/hr)						**Potential Emissions (tons/yr)**					
Source ID No.	**Benzene**	**Acetaldehyde**	**Toluene**	**Xylenes**	**n-Hexane**	**Formalde-hyde**	**Benzene**	**Acetaldehyde**	**Toluene**	**Xylenes**	**n-Hexane**	**Formalde-hyde**
Transfer Points												
Crush/Screen												
Stockpiles												
Haulroads												
CAT C4.4	**0.00175**	**0.00144**	**0.00077**	**0.00053**		**0.00144**	**0.000437**	**0.00036**	**0.000092**	**0.000134**		**0.000553**

Powerscreen® Warrior 1800

2 Deck Heavy Duty Incline Screen

Specification - Rev 8. 01/01/2013

POWERSCREEN®
A TEREX BRAND

Powerscreen® Warrior 1800

Specification - Rev 8. 01/01/2013

Specification

		Three Way Split	Two Way Split
Total weight	**Incline Belt**	30,000kg (66,200lbs)*	27,800kg (61,300lbs)*
	Incline Apron	32,500kg (71,650lbs)*	30,300kg (66,800lbs)*
Transport	**Length**	15.38m (50' 6")	14.99m (49' 2")
	Width	2.86m (9' 5")	2.86m (9' 5")
	Height	3.39m (11' 2")	3.39m (11' 2")
Operation	**Length**	14.4m (47' 2")	14.03m (46')
	Width	12.6m (41' 4")	7.74m (25' 5")
	Height	4.57m (14' 11")	4.55m (14' 11")
Screenunit		4.88m x 1.5m (16' x 5')	4.88m x 1.5m (16' x 5')
Powerunit		Diesel / Hydraulic	Diesel / Hydraulic
Plant Colour		RAL 5021	RAL 5021

Features & Benefits

- High capacity up to 600 tph (depending on feed size, mesh size & material type)
- Maximum feed size 600mm. Maximum allowable feed size may vary depending on material
- Suitable for scalping or stockpiling as a 3 way split or 2 way split machine
- Heavy duty inclined hopper & belt feeder belt featuring impact bars & impact rollers
- Hydraulic folding hopper sides & twin drive belt feeder
- Jack up screen facility for access to screen media & collection conveyor
- Unique hydraulic slide out facility on tail conveyor to aid screen media removal
- Heavy-duty aggressive 2 bearing screen box with 10mm stroke (optional 12mm stroke)
- Maximum mobility with heavy duty, low ground pressure crawler tracks
- Quick set up time typically under 15 minutes
- Hydraulically folding conveyors for transport
- Heavy duty crawler tracks, complete with removable pendant remote control system
- High performance hydraulic system

Application

Aggregate

- Sand & gravel
- Blasted rock
- River rock

Recycling

- Top soil
- C&D waste
- Composted materials
- Wood by-products
- Overburden
- Foundry waste

Mining

- Processed ores
- Processed minerals

Abbreviations: T=Track, W=Wheel, Std= Standard, Hyd= Hydraulic, W/O= Without, C/W= Complete with EXT= Extended, DDVG= Double deck vibrating grid, Inc= Including, Aux= Auxiliary, Conv= Conveyor, 3WS= 3 way split, 2WS= 2 way split, *= depending on machine specification

POWERSCREEN® A TEREX

Powerscreen® Warrior 1800

Specification - Rev 8. 01/01/2013

Hopper

Target area: 4.4m (14' 5") long x 2.7m (8' 10") wide
Hopper capacity: 6.8m^3 (8.9 cu. yd.)
Feed in height: 4.23m (13' 10") (side)
Feed in height: 3.63m (11' 11") (rear)
Feed in height: 3.20m (10' 8") (collapsed hopper)

Hydraulic folding hopper sides, manufactured from wear resistant steel
Rear wall collapsible for direct feeding
Hydraulic slide & raise facilities for transport

Heavy Duty Feed Conveyor

1300mm (51") 4 ply heavy duty grade belt
3.43m (11' 3") drum centres
Driving speed: 17rpm (20m/min)

Heavy duty impact bars & impact rollers
Heavy duty drive featuring twin gearbox drive
Variable speed control
Supergrip drive drum as standard

Screenbox

Heavy Duty 4.8m x 1.5m (16' x 5') 2 deck, 2 bearing incline screen with highly aggressive screen drive

Self adjusting belt driven screen drive, increased flexibility over direct drive alternatives, adjustable stroke: 10mm - 12mm (3/8" - 1/2")

Side tensioned or modular top deck
End tensioned or modular bottom deck
Hydraulic screen angle adjustment 14° - 18°

Jack up screen facility for access to screen media
Galvanised maintenance platforms on both sides of screen
Modular screen suitable for bofor, finger, punch plate and mesh screen media

Powerscreen® Warrior 1800

Specification - Rev 8. 01/01/2013

Underscreen Conveyor

1200mm (48") wide 3 ply plain belt
3.97m (11' 9") drum centres
Accessible via jack up screen facility

Fines - Side Conveyor

900mm (35") wide 3 ply plain belt (chevron option)
7.07m (23' 2") drum centres
3.70m (12' 2") stockpile height
76m^3 (99 cu. yd.) stockpile capacity
Impact bars under feedboot area
Variable speed control
Hydraulically folding, angle adjustable 14° - 25°
Operates on separate hydraulic circuit

Midsize - Side Conveyor

900mm (35") wide 3 ply plain belt (chevron option)
7.07m (23' 2") drum centres
3.44m (11' 3") stockpile height
61m^3 (80 cu. yd.) stockpile capacity
Impact bars under feedboot area
Variable speed control
Hydraulically folding, angle adjustable 14° - 25°
Removed during 2 way split operation

Oversize - Tail Conveyor

1400mm (55") wide 4 ply chevron belt
5.15m (16' 10") drum centres
3.73 m (12' 3") stockpile height 3WS mode
77m^3 (101 cu. yd.) stockpile capacity
3.0m (9' 10") stockpile height 2WS mode
40m^3 (52 cu. yd.) stockpile capacity
Hydraulic raise & lower facility
Impact bar/ roller combination
Hydraulic slide out facility to aid screen access
Angle adjustable 10° - 24°
Variable speed control

POWERSCREEN®

Powerscreen® Warrior 1800

Specification - Rev 8. 01/01/2013

Powerunit & Hydraulics

Engine:
Tier 3 / Stage 3A—Caterpillar C4.4 ATAAC 4 cylinder engine

Performance:
83 kW (111.3hp) @ 2200rpm

Tank Capacities:

Fuel:	336 L (88 US Gal)
Hydraulic Oil:	564 L (149 US Gal)

Pumps:

Flywheel:	Cast iron 46/46/33/33cc/rev quad pump
PTO 'A':	Cast iron 23/23cc/rev tandem

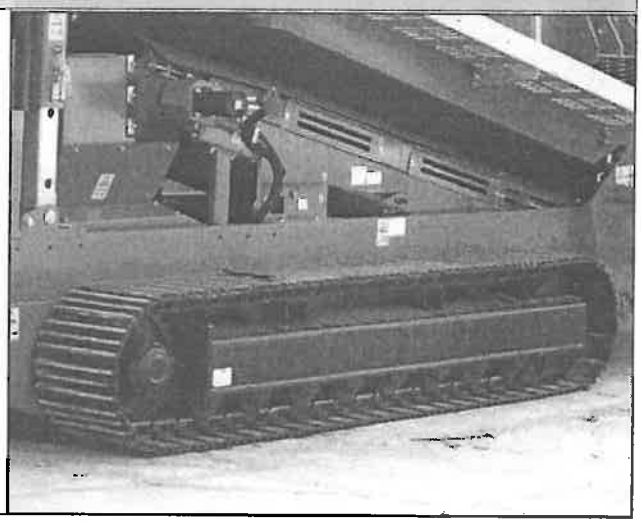
Motors:

Belt feeder:	125cc/rev
Tail conveyor:	Cast iron 800cc/rev
Mid fines side conveyor:	Cast iron 500cc/rev
Under screen:	Cast iron 500cc/rev
Fines conveyor :	Cast iron 500cc/rev
Screen:	Cast iron 101.1
Optional apron feeder:	400cc/rev

Optional Diesel Engine:
Tier 4i / Stage 3B—Caterpillar C4.4 4 cylinder engine developing 82kW @ 2200rpm

Crawler Track Data

Track width:	500m
Approximate Speed:	1.0 kph (0.62mph)
Flow rate:	101 Lpm

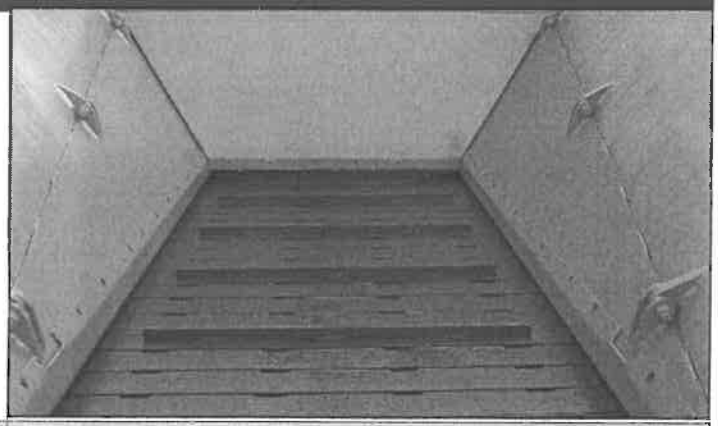


Powerscreen® Warrior 1800 Options

Specification - Rev 8. 01/01/2013

Incline Apron Feeder

1300mm (51") wide wear resistant feed apron
3.39m (11' 1") apron centres
Fitted with single gearbox drive
Variable speed control



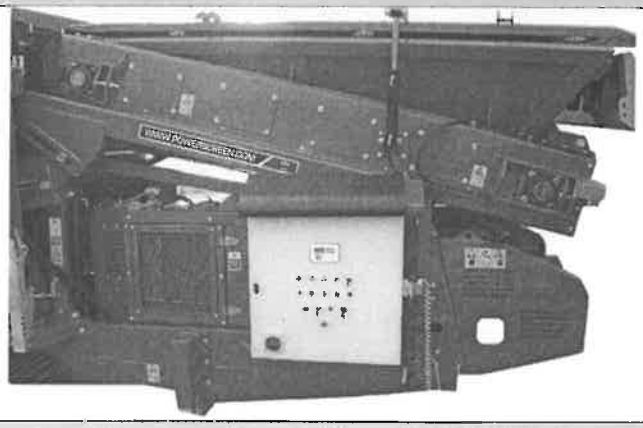
2 Way Split Configuration

Mid sized side conveyor removed
Machine built as 2 way split
Top deck & bottom deck oversize material fed on to tail conveyor

Dual Power

Dual Power System:
2 of electric motors: 37 kW (50hp) & 37 kW (50hp)
Diesel engine
Integrated control system

This controls either diesel-hydraulic or electric-hydraulic functions



Other Options

Different coloured machine
Side conveyor telescopic hydraulic extensions
Chevron side conveyor belts
Optional engine
Auto lubrication system
Radio controlled tracking

Other Media Options

Top Deck
Grizzly / bofar deck
Finger screens
Punch plate: mild steel or wear resistant steel
Screen mesh: standard, heavy duty or welded

Bottom Deck
Finger screens
Punch plate: mild steel or wear resistant steel
Screen mesh: standard, heavy duty or welded

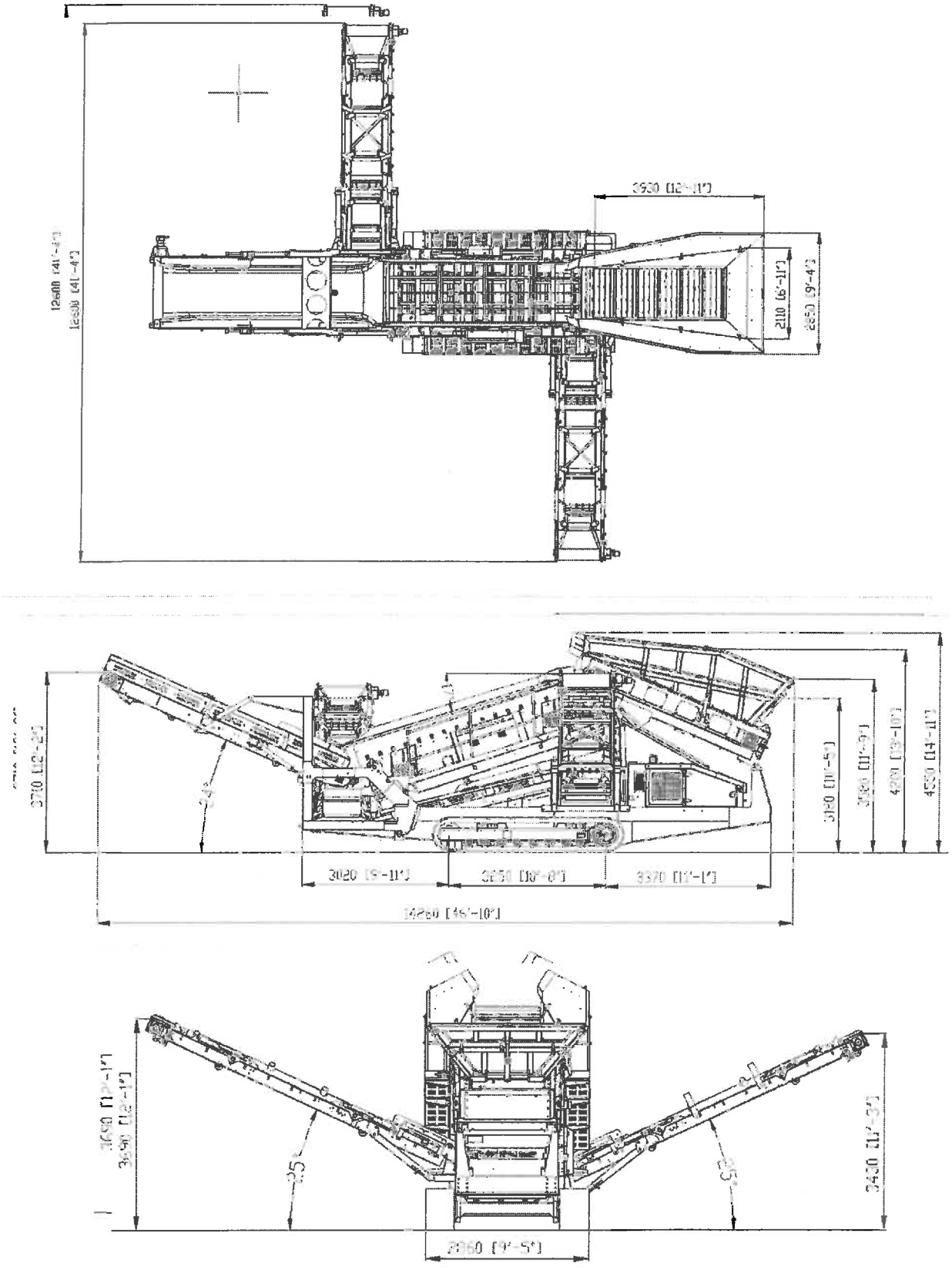
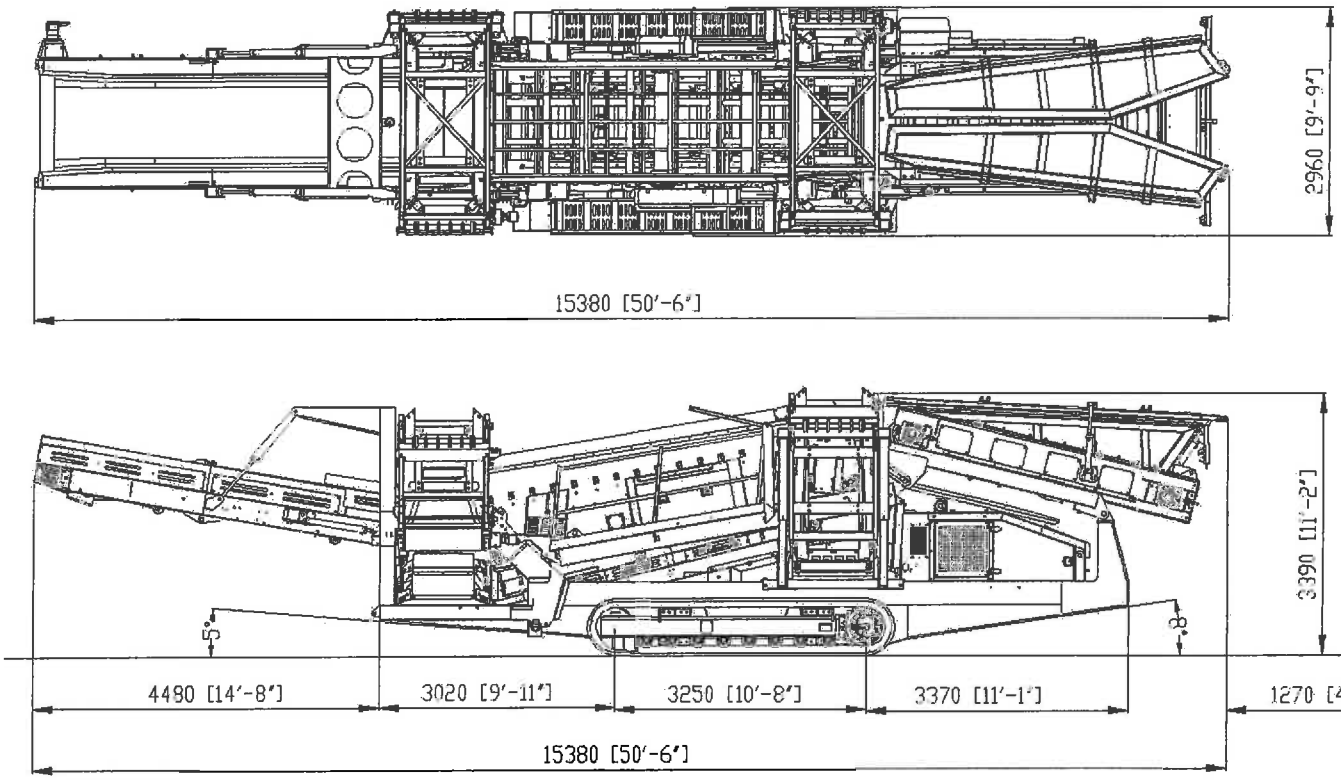


Figure 1: Warrior 1800 2 Deck Track
3 Way Split
Working Position



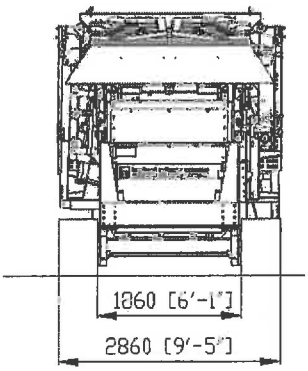


Figure 2: Warrior 1800 2 Deck Track
3 Way Split
Transport Position

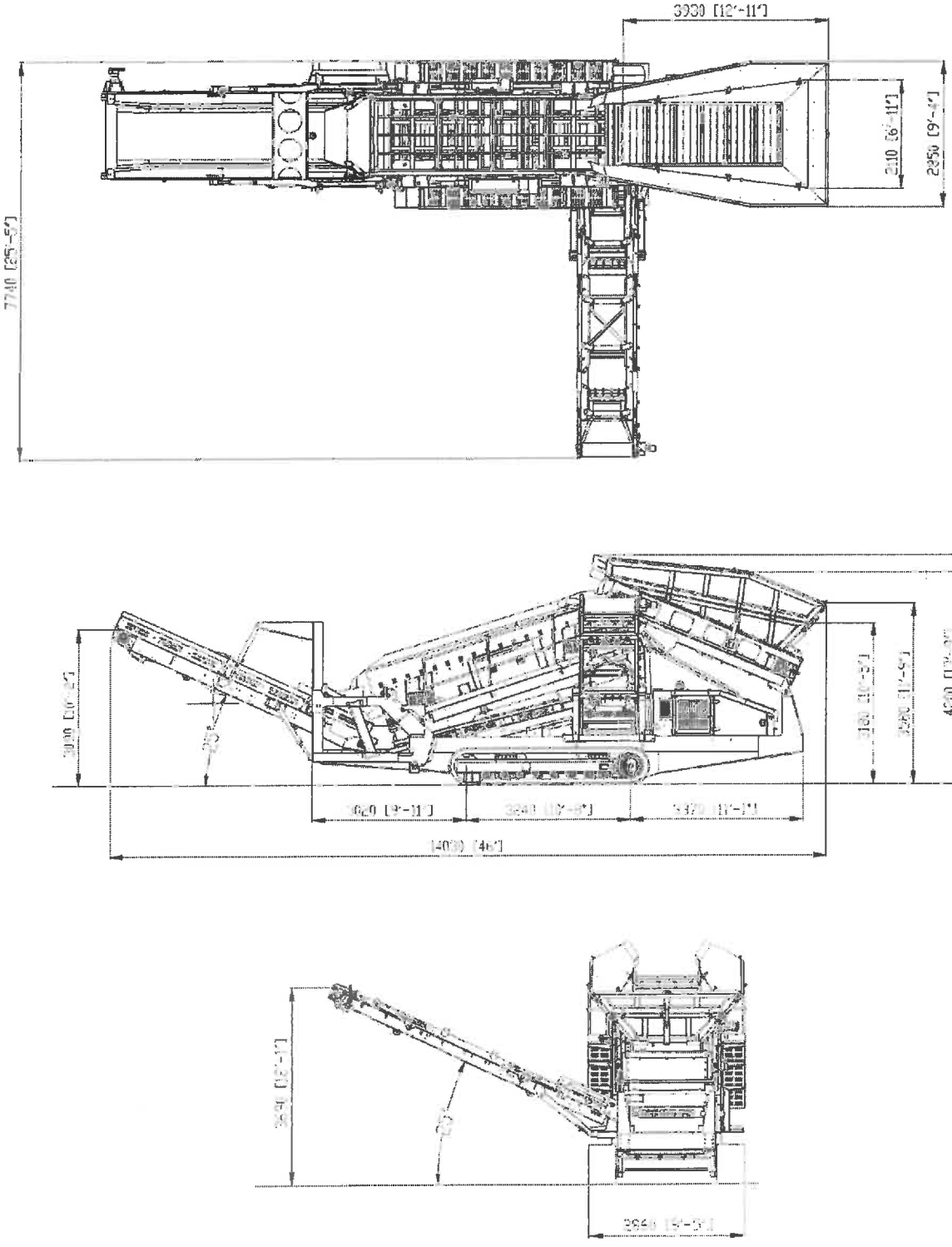
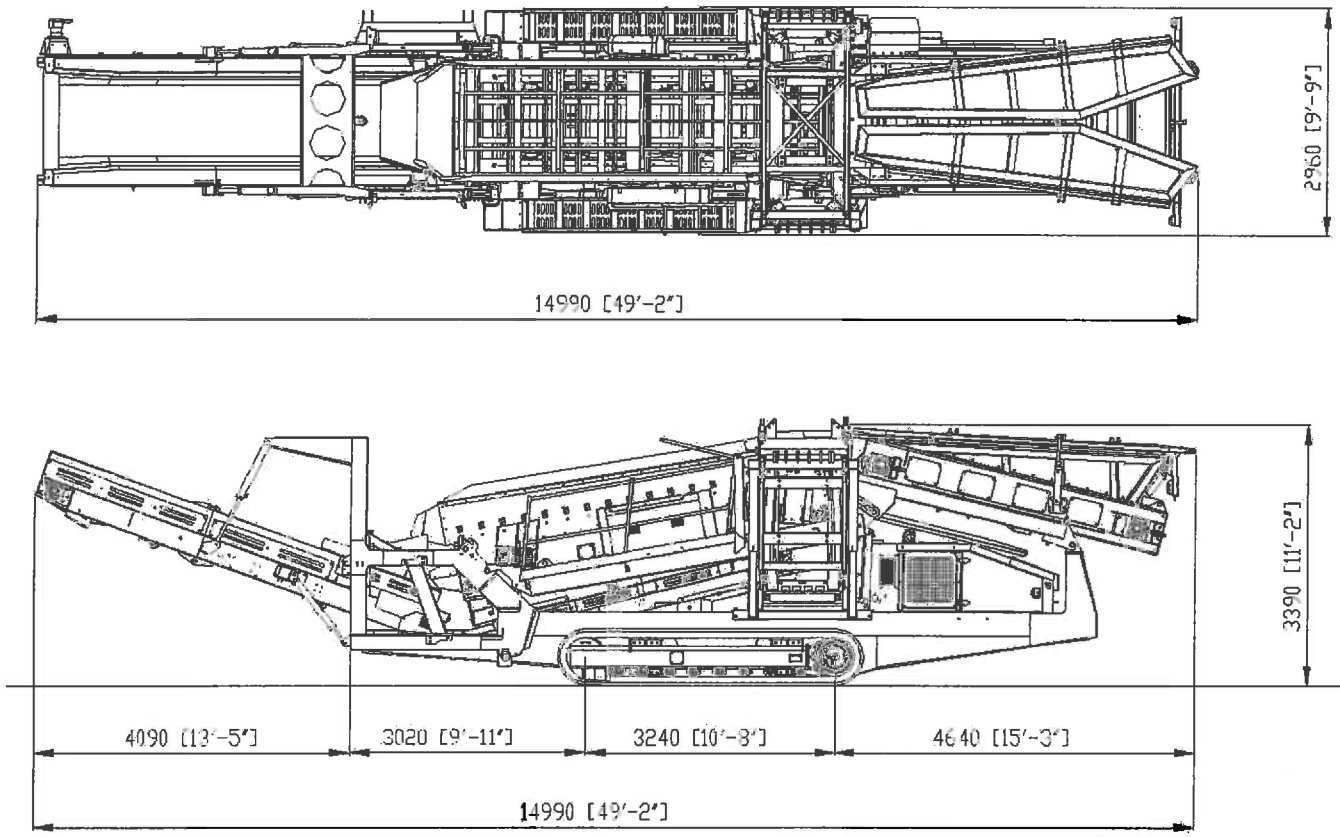


Figure 3: Warrior 1800 2 Deck Track
2 Way Split
Working Position



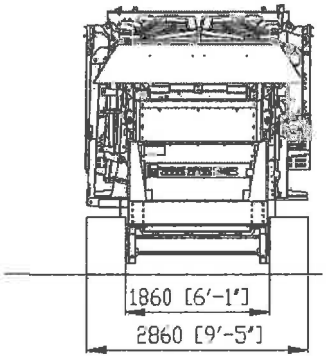


Figure 4: Warrior 1800 2 Deck Track
2 Way Split
Transport Position

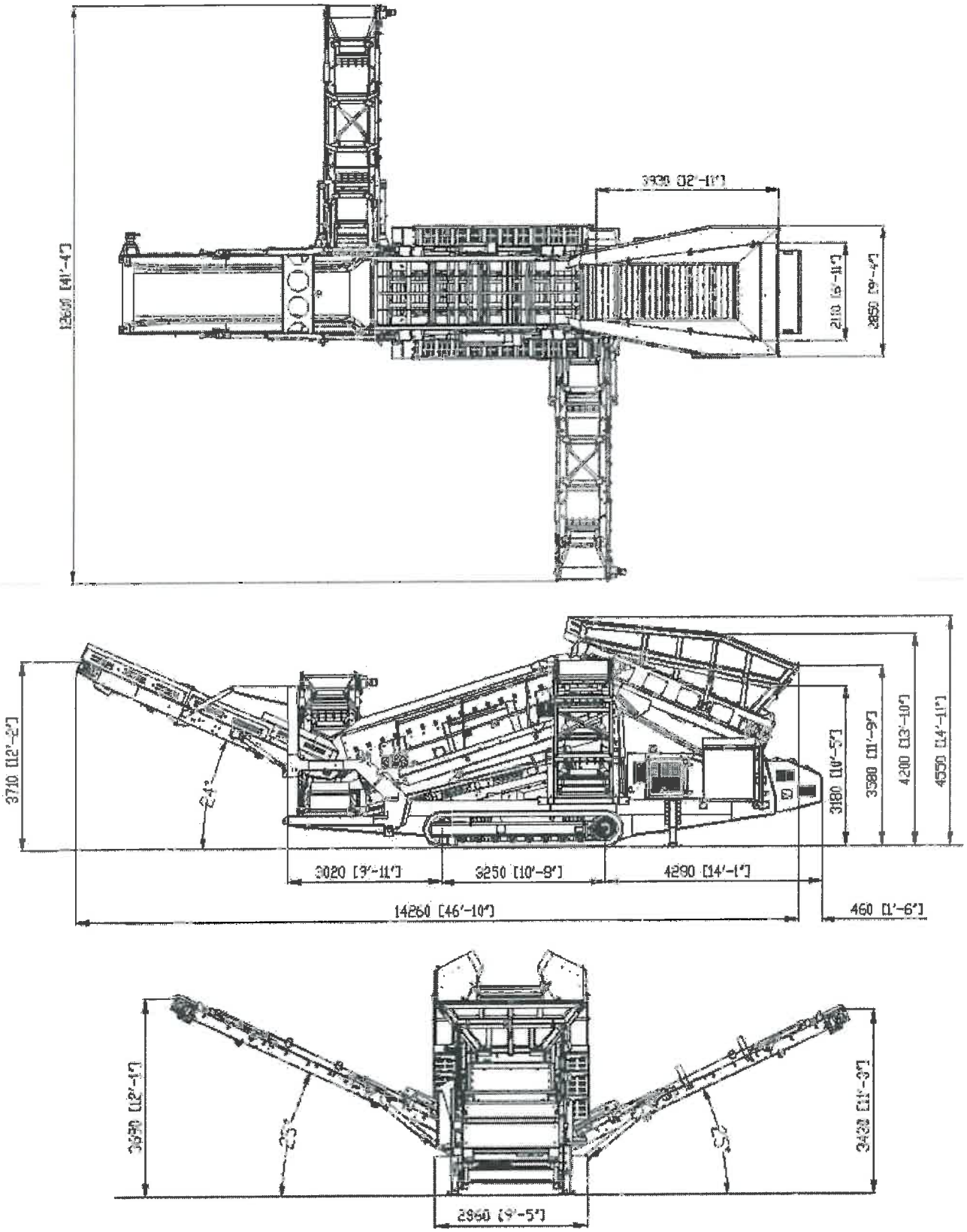
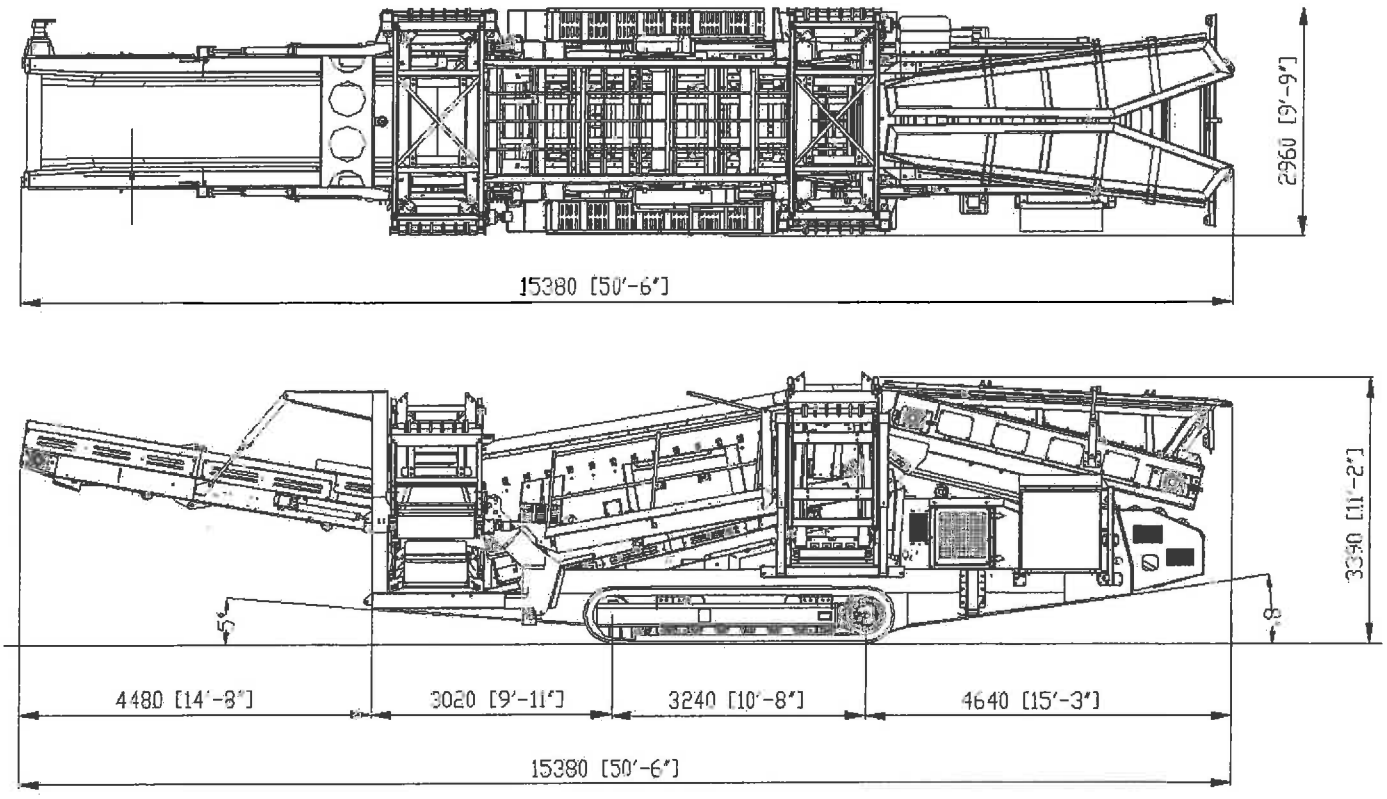


Figure 5: Warrior 1800 2 Deck Track
3 Way Split
Dual Power
Working Position



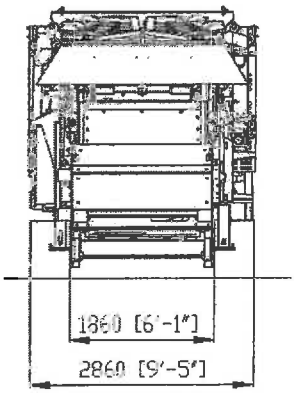


Figure 6: Warrior 1800 2 Deck Track
3 Way Split
Dual Power
Transport Position

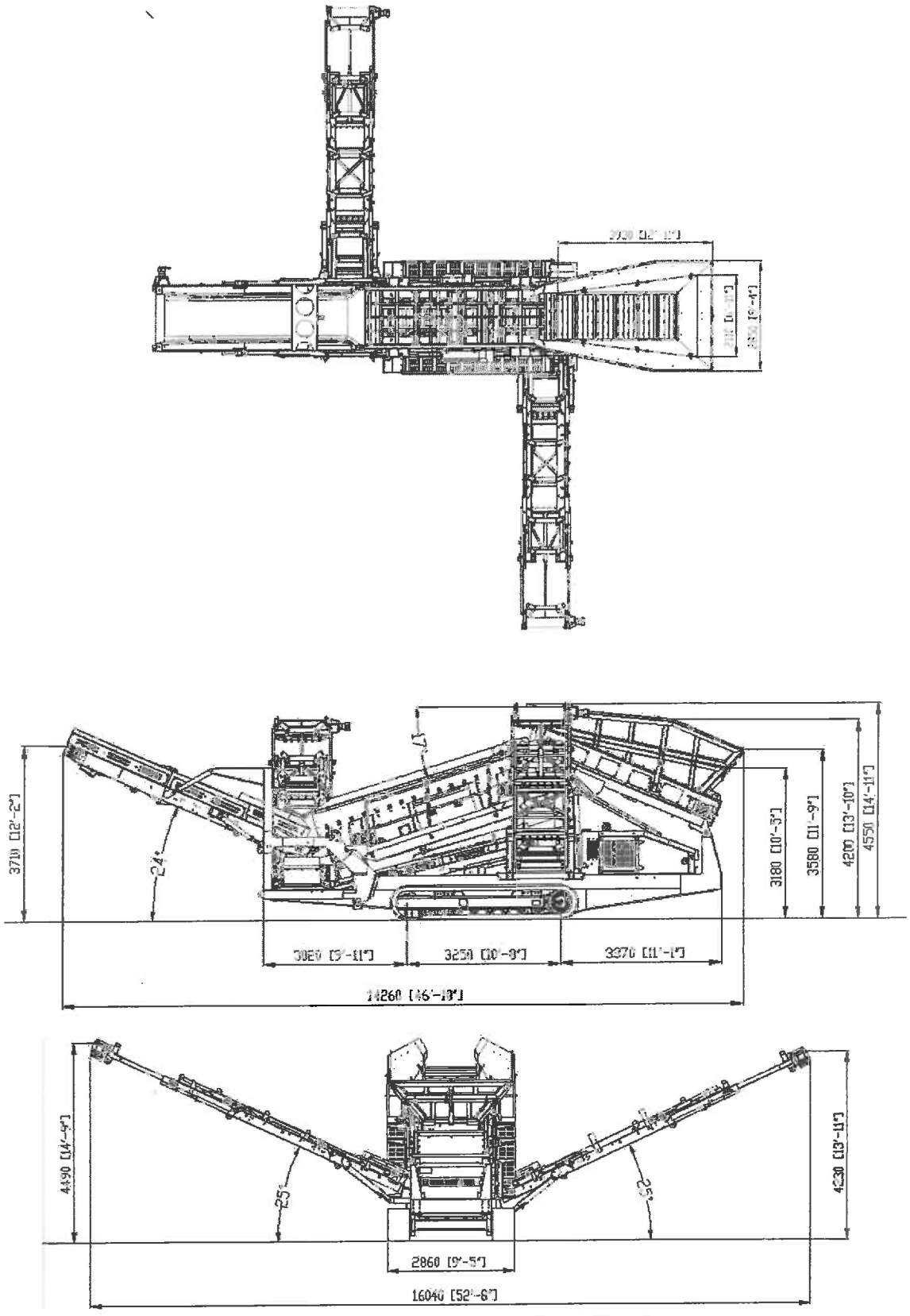
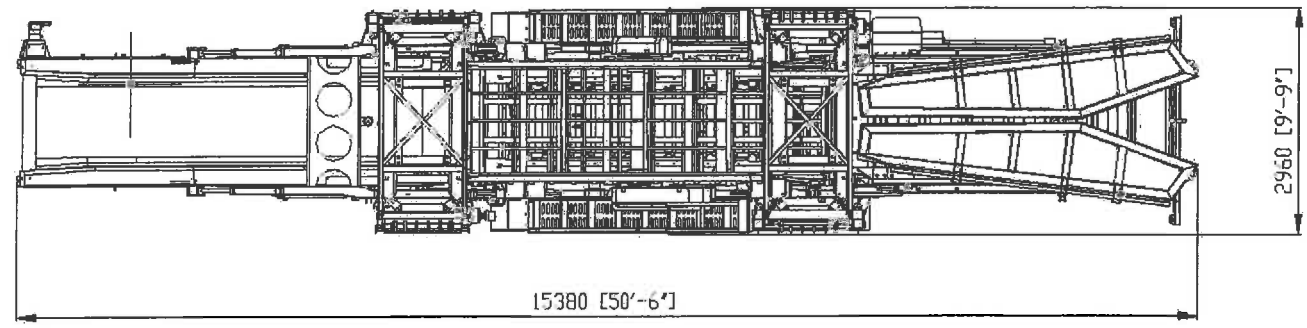
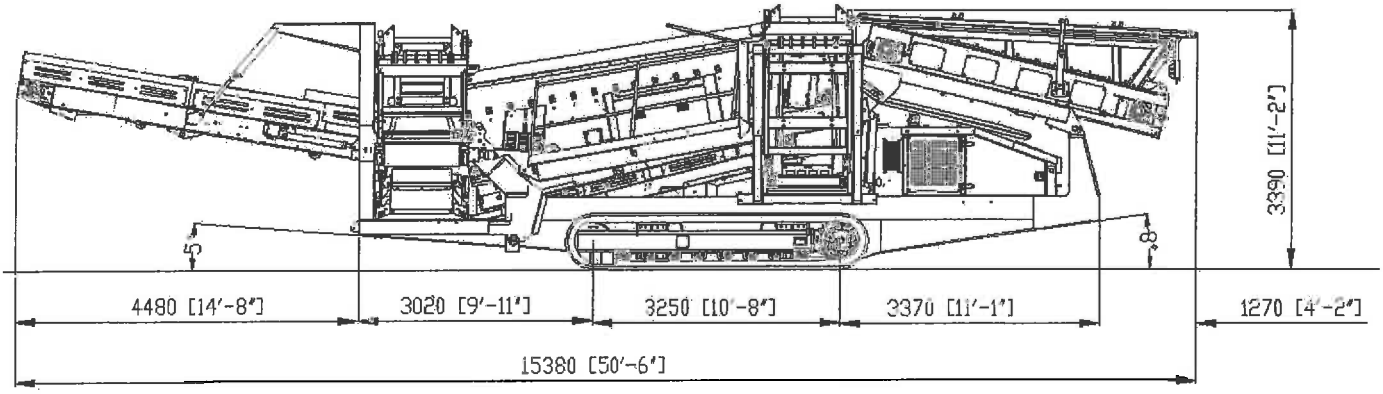


Figure 7: Warrior 1800 2 Deck Track
3 Way Split
Telescopic Side Conveyors
Working Position





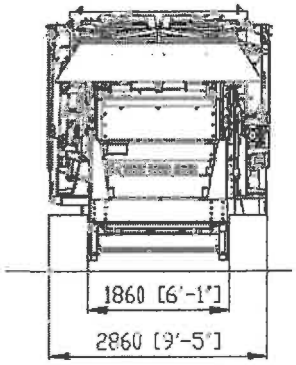


Figure 8: Warrior 1800 2 Deck Track
3 Way Split
Telescopic Side Conveyors
Transport Position

Powerscreen® Warrior 1800

Specification - Rev 8. 01/01/2013

Powerscreen equipment complies with CE requirements.

Please consult Powerscreen if you have any other specific requirements in respect of guarding, noise or vibration levels, dust emissions, or any other factors relevant to health and safety measures or environmental protection needs. On receipt of specific requests, we will endeavour to ascertain the need for additional equipment and, if appropriate, quote extra to contract prices.

All reasonable steps have been taken to ensure the accuracy of this publication, however due to a policy of continual product development we reserve the right to change specifications without notice.

It is the importers' responsibility to check that all equipment supplied complies with local legislation regulatory requirements.

Plant performance figures given in this brochure are for illustration purposes only and will vary depending upon various factors, including feed material gradings and characteristics. Information relating to capacity or performance contained within this publication is not intended to be, nor will be, legally binding.

Terex GB Ltd.
200 Coalisland Road
Dungannon
Co. Tyrone
Northern Ireland
BT71 4DR

Tel: +44(0) 28 8774 0701
Fax: +44(0) 28 8774 6569

E-Mail: sales@powerscreen.com
Web: www.powerscreen.com