Prepared for



**Revised August 2023** 

Prepared by Parametrix

Prepared for

**DTG Recycle** 41 Rocky Top Road Yakima, WA 98908

Prepared by

**Parametrix** 835 North Post, Suite 201 Spokane, WA 99201 T. 509.328.3371 F. 1.855.542.6353 www.parametrix.com

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- B Yakima Regional Clean Air Agency Yakima Health District Permits
- C SEPA Determinations of Non-Significance
- D DTG Recycle Yakima LPL and MRF, Operations Plan
- E DTG Recycle Yakima PCS Treatment Facility, Operations Plan
- F Road and Work Area Surface Dust Field Sampling and Laboratory Testing Report, HWA

## ACRONYMS AND ABBREVIATIONS

AO	Agreed Order
DTG	DTG Enterprises, Inc.
ВАСТ	Best Available Control Technology
C&D debris	Construction and Demolition
CI	Compression ignition
CUP	Conditional Use Permit
Ecology	Washington State Department of Ecology
EMI	East Mountain Investments LLC
EPA	United States Environmental Protection Agency
H <sub>2</sub> S	Hydrogen sulfide
НАР	Hazardous air pollutant
LNG/CNG	Liquefied/compressed natural gas
LPG	Liquefied petroleum gas
LPL	Limited purpose landfill
m	meters
m <sup>2</sup>	square meters
MRF	Material recovery facility
MSW	Municipal solid waste
MTCA	Model Toxics Control Act
NMOCs	Nonmethane organic compounds
NSR	New Source Review
PCS	Petroleum contaminated soil
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTE	Potential to emit
RICE	Reciprocal internal combustion engines
SRB	Sulfate-reducing bacteria

## ACRONYMS AND ABBREVIATIONS (CONTINUED)

SEPA	State Environmental Policy Act
SIP	State Implementation Plan
SO4 <sup>2-</sup>	Sulfate
TAPs	Toxic air pollutants
VOC	volatile organic compound
WAC	Washington Administrative Code
yd <sup>3</sup>	Cubic yard
YHD	Yakima Health District
YPD	Yakima County Planning Division
YRCAA	Yakima Regional Clean Air Agency

## 1. **PROJECT DESCRIPTION**

This New Source Review (NSR) Application has been developed for the DTG Enterprises, Inc. facility located at 41 Rocky Top Road in Yakima, Washington for review by the Yakima Regional Clean Air Agency (YRCAA). The facility currently includes:

- A limited purpose landfill (LPL) which includes a proposed material recovery facility (MRF), and
- A petroleum contaminated soil (PCS) remediation facility.

DTG will comply with operating hour limitations imposed by Yakima County in CUP15-051, and is therefore requesting that YRCAA include those limitations in any Order of Approval.

This NSR Application is specific to the operation of the LPL and the MRF. DTG will submit an additional Notice of Construction application prior to accepting any new PCS. Completed NSR forms for the LPL and MRF have been included in Appendix A.

### 1.1 Project Owner/Operator

The DTG facility is owned and operated by DTG. The primary contact is Ian Sutton, DTG Director of Engineering.

DTG Enterprises, Inc. PO Box 14203 Mill Creek, WA 9808 (425) 549-3000 Email: isutton@dtgrecycle.com.

### 1.2 Site Description

The facility is in a rural area northwest of the City of Yakima. Figure 1 shows the Site Plan, prepared in 2015 for the previous owner, Anderson Rock and Demolition Pits.

DTG subsidiary East Mountain Investments LLC (EMI) owns the land. DTG leases the land from EMI, owns the equipment, and operates the facility. The facility has a permitted LPL waste disposal footprint of approximately 125 acres and the permitted PCS facility is approximately 7 acres. The permitted MRF operation occurs within the LPL footprint. Figure 2 and Figure 3 provide typical aerial views of the current LPL and PCS operations, respectively. This remote location provides security and reduces impacts on the surrounding community.

There are private residences and orchards to the north and northeast of the facility. The area to the southwest, west, south, and southeast is vacant arid land.



Figure 1. DTG Site Plan



Figure 2. LPL Aerial



Figure 3. PCS Facility

### 1.3 LPL Phase Planning

Current LPL phase planning redesignates the historic fill area as Phase 1 as shown in Figure 4. Phase 1 is at capacity which is estimated at approximately 2,500,000 cubic yards. Fill is currently being stored in a temporary stockpile area south and adjacent to Phase 1. Phase 2 is under construction and will be completed in 2023 at the location shown in Figure 4. Future filling will occur in Phase 2, including relocation of the temporary stockpile. The Phase 2 Development and relocation of the temporarily store material into Phase 2 are temporary construction activities and not representative of typical site operation and emissions. Prior to commencement of these two projects DTG will file Notices of Project with YRCAA and comply with the Construction Dust Control Policy of the Yakima Regional Clean Air Agency.

Figure 5 and Figure 6 show the Phase 2 fill projections with an assumed top elevation of 2,100 feet which provides a disposal capacity of approximately 2,200,000 cubic yards. This NSR application is specific to Phases 1 and 2. As part of the future Phase 3 Development permitting process, the active NSR permit may be reassessed to confirm the application information remains relevant to LPL operations at the time of Phase 3 Development.

Figure 7 shows the conceptual final fill configuration of the permitted LPL waste disposal footprint (approximately 125 acres). At final fill, the LPL expended capacity is estimated to be approximately 33,000,000 cubic yards.



Figure 4. Conceptual Phasing



Figure 5. Phase 2 Fill



Figure 6. Phase 2 Fill Sections



Figure 7. Conceptual Final Fill

### 1.4 Permits

The existing LPL is currently operated under a solid waste LPL permit that was originally issued by Yakima Health District (YHD) on April 8, 2008. The LPL also has an updated Type III Conditional Use Permit (CUP), which was issued by the Yakima County Planning Division (YPD) in a Hearing Examiner's Decision Dated November 27, 2015. The current LPL permit was issued by YHD on June 24, 2020.

The MRF operational solid waste permit was issued on July 8, 2021. The emissions associated with the potential MRF operation has been included in the LPL information.

The existing PCS is currently operated under a Special Property Use Permit to establish an additional 15 acres at the existing facility for the remediation of PCS, issued by the Yakima County Zoning Adjustor on October 15, 1992. The current solid waste permit to operate the PCS operation was issued by the YHD on June 24, 2020.

The three operations are under the local jurisdiction of the YHD and the Washington State Department of Ecology (Ecology). These permits are included in Appendix B.

The previous owner, Anderson Rock and Demolition Pits, did not obtain an Order of Approval from YRCAA for operation of the facilities.

### 1.5 Relevant Current Permit Activity

Landfill gas emissions were encountered in a localized portion of the landfill on the west slope of Phase 1. The emissions were initially regulatorily approached through a Model Toxics Control Act (MTCA) Agreed Order (AO) process administered by Ecology which was executed in February 2023 and is still in process. Through further investigations, the localized area has been identified as a subsurface landfill fire which is being regulated through YHD under solid waste permit HSW2019-00020.

This NSR application does not assess the emissions from the AO area as these are being addressed through other regulatory means. At the conclusion of the MTCA and YHD processes, if emissions do not meet the substantive requirements for air emissions, the Order of Approval may require revision.

### 1.6 Environmental Review (SEPA)

The LPL operation underwent State Environmental Policy Act (SEPA) environmental review with the YPD as the lead agency. The most recent environmental checklist was prepared describing a proposed landfill expansion. The review resulted in a Determination of Non-Significance dated September 9, 2015. The addition of the MRF operation did not require SEPA environmental review.

The PCS operation underwent SEPA environmental review with the YPD as the lead agency. An environmental checklist was prepared describing the proposed operation. The review resulted in a Determination of Non-Significance dated September 10, 1992.

The determinations are included in Appendix C.

### 1.7 LPL Operations

Below is a brief summary of LPL operations, including the MRF. The LPL Operations Plan and MRF Plan of Operations has been included in Appendix D for additional information.

### 1.7.1 Facility Operating Hours

The LPL is permitted by the County of Yakima to operate Monday through Saturday from 6 a.m. to 6 p.m., or a maximum of 3,768 hours per year. Normal operating hours for waste disposal are Monday through Friday from 7 a.m. to 5 p.m., except the facility is shut down for the following holidays:

- New Year's Day (January 1)
- Independence Day (July 4)
- Thanksgiving Day (fourth Thursday in November)
- Christmas Day (December 25)

This works out to between 2,570 to 2,600 hours per year, for an average of 2,581 hours per year.

#### 1.7.2 Accepted Waste Types

Only the following Waste Types are accepted at the LPL:

- Cured concrete
- Asphaltic materials
- Brick and masonry
- Ceramic materials
- Glass
- Stainless steel
- Aluminum
- Lime
- Gypsum, scrap drywall
- Dirt and rock
- Construction, demolition, and land-clearing debris
- Wood waste
- Ash (other than special incinerator ash)
- Dredge spoils

The inorganic permitted waste types are considered to be inert, or non-biodegradable; therefore, emissions of landfill gases such as methane, carbon dioxide, nonmethane organic compounds (NMOCs), and individual air pollutants from municipal solid waste landfills are assumed to be negligible. The organic permitted waste (stumps, brush and other wood waste) is typically ground up and used as feedstocks for recycling. The assumption of negligible emissions is further supported by:

- 1. The quarterly landfill gas monitoring for methane which is reported to YHD and has no gas detections above actionable levels,
- 2. Daily ambient air monitoring associated with the AO process discussed in Section 1.5 which consistently show no detections for methane, carbon monoxide, volatile organic compounds, or hydrogen sulfide,
- 3. The ambient air results from the July 2022 emissions investigation, and
- 4. The ambient air results from the March 2023 emissions investigation.

The following list are the acceptable recyclable materials for MRF processing.

- Cured concrete
- Asphaltic pavement
- Metal
- Construction, demolition, and land-clearing debris
- Wood waste

#### 1.7.3 Waste Disposal Procedures

Waste is accepted from commercial and public customers.

Customers will be directed to the active working area of the landfill and will be further directed to dump their waste as close to the fill area as possible. After inspecting the load for non-permitted waste, the waste will be pushed into the fill area with the bulldozer. The waste will be placed in lifts up to 15 feet in depth with perimeter slopes of 2:1 or flatter. Waste will be compacted using the bulldozer by traversing the entire length of the working face. In areas that will not receive waste for an extended period, or when the waste material warrants adding cover on a more frequent basis, the waste will be covered with a minimum of six inches of soil. Cover soil is available on site from borrow, quarry, and treated PCS areas. Cover soils will be limited to material with minimal organics and rock sizes less than six inches in the largest dimension.

Customers with wood waste will be directed to the current location of the incoming wood waste and will be directed to dump their waste as close to the feedstock pile as possible. After inspecting the load for non-permitted waste, the wood waste will be pushed into the feedstock pile. The feedstock pile will be fed to the grinder with a loader. Grinder output will be conveyed to a wood chip pile. Water sprays will be used whenever the tub grinder is operating during dry weather to reduce emissions of particulate matter.

#### 1.7.4 Recycling or Recovery

Material received at the MRF suitable for recycling will be separated and recycled to the extent possible. Material will be sorted by machinery, and/or hand, into appropriate recyclable material containers or piles.

An initial bulk sort will be performed from the waste pile. Large, heavy, and bulky items will be removed with an excavator and placed to the side of the tipping area in piles or containers in accordance with material type.

After the initial bulk sort from the stockpile, all remaining materials will be transferred from the stockpile onto the sorting station feeder with an excavator. The mobile sorting station will be an MGL PPS 4-Bay manufactured by MGL Engineering, or similar. Mobile sorting station product information is in Appendix D of the MRF Plan of Operations, which is in Appendix D of this document. The station will have a conveyor to transport material along an elevated sort line staffed by MRF personnel. Recyclable materials will be hand-sorted and deposited directly into roll-off containers positioned at grade below the sort line. Sorted material containers will be transported to an appropriate area for further material processing (grinding, baling, etc.) or transferred to piles or larger containers for consolidation and export offsite.

Residual waste will be reviewed for acceptability in the LPL. Equipment will remove the residual material containers and dispose of the material into the active area of the LPL.

### 1.8 PCS Operations

Below is a brief summary of PCS operations. The PCS Operations Plan has been included in Appendix E for additional information. As stated previously, DTG intends to discontinue acceptance of PCS until such a time as an Order of Approval can be obtained from YRCAA, but operations will continue until all existing PCS has been fully treated.

### 1.8.1 Facility Operations

The PCS operation is permitted to operate with the same hours as the LPL, as discussed in Section 1.6.1. The exact location of the salvage/recycling area will be determined by the need at that time and will be moved as conditions change. It will, however, remain within the approved LPL area.

### 1.8.2 Accepted Waste Type and Volume

The PCS Operation Plan states that the site will accept only PCS (e.g., soils with gasoline, diesel, or waste oil contamination. The DTG site can treat approximately 7,000 cubic yards (yd<sup>3</sup>) of soils at one time. Annual volume depends upon how long it takes to treat each plot. A reasonable estimate for typical operations is 11,000 yd<sup>3</sup> per year. Remediation is done through a combination of bioremediation and aeration.

#### 1.8.3 Waste Disposal Procedures

The PCS facility will not accept any loads of PCS without an Approval Letter from YHD. No soils with contamination, other than petroleum, above Model Toxics Control Act ("MTCA") Method A limits will be accepted for treatment. Each batch of PCS to be treated at the facility must include a letter of approval from YHD stating that the material is approved for treatment at the facility. The Approval Letter includes:

- Financially responsible party
- YHD job name
- Type(s) of contamination
- Level(s) of contamination
- Approved plan of action

Approved PCS will be dumped by the hauler at the PCS remediation site. Each approved batch will be stockpiled individually to prevent cross contamination, with approximately 5' between plots. It is spread in a plot with a backhoe or front loader to an appropriate depth between 6"-18". The depth depends on volume and severity of contaminants. Piles are numbered and mapped for reference. After an approved batch has been received, DTG marks the pile with a labelled stake.

Piles are aerated as needed to enhance bioremediation. Additional moisture and fertilizer are added as needed to aid the remediation process. This treatment process reduces or eliminates contaminants and harmful characteristics. The piles are not diluted to meet treatment goals, but incidental dilution may occur.

The PCS piles are sampled and analyzed by an approved and certified laboratory on a periodic basis. Once material is below contaminant threshold, the test results of the remediated piles are submitted to the YHD with a request for release approval. If treated soil is approved for release by YHD, YHD will provide a release approval letter. Once the letter is received, the treated material is removed from the PCS area and disposed of at the LPL. Piles are not removed without a release approval letter from YHD.

### 1.9 Rock Crushing by DeAtley

DeAtley Crushing Service has an Order of Approval for a portable rock crushing operation within Yakima County, issued by YRCAA. DeAtley brings a portable rock crushing operation to the DTG Yakima facility on an occasional basis to crush rocks into various graded sizes of gravel for sale to the public. DTG does not operate any rock crushing or screening equipment at the Yakima facility, so this NOC application does not include any rock crushing.

### 1.10 Equipment at the DTG Facility

Table 1 lists the onsite equipment currently owned by and used for all operations at the DTG facility, as well as the anticipated container tipper and MRF conveyor generator.

				Regulatory
Equipment	Make	Model	Fuel	status
Fuel/Lube Truck	Peterbuilt	PB335	Diesel	Mobile
Water truck	Ford	F550	Diesel	Mobile
Pressure Clean Truck	Ford	F250	Gas	Mobile
Pickup	Ford	F250	Gas	Mobile
Pickup	Chev	1500	Gas	Mobile
Pickup	Chev	Silverado	Gas	Mobile
Van	Ford	Econoline	Gas	Mobile
Side by Side	Polaris	Ranger Crew XP1000	Gas	Mobile
Excavator	Caterpillar	320	Diesel	Nonroad
Haul truck	Caterpillar	740 B	Diesel	Nonroad
Haul truck	Caterpillar	740 B	Diesel	Nonroad
Dump Truck	Chev	C3500	Gas	Mobile
Loader	Caterpillar	980M	Diesel	Nonroad
Dozer	Caterpillar	D-8T	Diesel	Nonroad
Compactor	Caterpillar	836K	Diesel	Nonroad
Tipper (C&D)	Columbia Industries	New horizon 65 ton	Diesel	Nonroad
Tipper (MRF)	Columbia Industries	New horizon 65 ton	Diesel	Nonroad
Loader	Caterpillar	962K	Diesel	Nonroad
Backhoe	John Deere	510D	Diesel	Nonroad
Screen plant	CEC	Screen-1t	Diesel	Nonroad
Portable sort line, power source	Perkins	403F-11	Diesel	Nonroad
Portable sort line, power source	Perkins	403F-11	Diesel	Nonroad
Tub grinder	CW Mill	TCII 1564P	Diesel	Nonroad
Sweeper	Broce	RC300	Diesel	Nonroad
Excavator	Luigong	CLG906	Diesel	Nonroad
Water truck	Kenworth	K20	Diesel	Nonroad
Motor grader	Caterpillar	120G	Diesel	Nonroad
Tractor	KW	10-1043	Diesel	Nonroad
Tracked Jaw Crusher (Not used)	Pioneer	FT2640	Diesel	Nonroad

#### Table 1. Equipment List

Notes: Equipment listed in Table 1 is either moved around the site as needed to facilitate operations, or is some type of mobile vehicle. Engines used on equipment that moves around the site are classified as nonroad engines, which are regulated under Washington Administrative Code (WAC) 173 400-035, and are exempt from new source review per WAC 173-400-110(1)(b). Mobile vehicles are not regulated under Chapter 173-400 WAC. Emissions from mobile vehicles are not subject to new source review per WAC 173-400-020(2)(b).

### 1.11 North American Industry Classification System

NAICS: 562212 SIC: 4953

## 2. FEE

A check for the \$400 filing fee will accompany this application. DTG understands that a NSR review fee will be assessed, and invoiced, and that the application will not be considered complete until all permit application and review fees have been paid in full.

## **3.** SEPA REVIEW

As stated above, the site operations have undergone SEPA environmental review through the YPD. A copy of the final Determination of Non-Significance has been provided in Appendix D.

## 4. LPL EMISSIONS

### 4.1 LPL Silt Content Measurements

HWA GeoSciences Inc. (HWA) performed field sampling and laboratory testing for the determination of silt content in soils on roadways and work areas within the DTG LPL in Yakima, Washington. HWA provided a report, which is included in Appendix F of this application.

### 4.1.1 Field Sampling

Field samples were obtained at the Yakima LPL on November 30, 2021, by a geologist from HWA. Samples were obtained at five locations comprised of; three roadway locations (RS), and two work area surface (WAS) locations as shown on Figure A-1 in Appendix A of the HWA report. Each laboratory test sample consisted of a composite of 2 to 4 field samples obtained at each proposed test location. A field report describing activities during sampling at each location, along with photographs of selected site conditions during sampling, is presented in Appendix A of the HWA report. HWA conducted the field sampling under the observation of Wade Porter of YRCAA.

Fifteen field samples were obtained to represent conditions at five locations consisting of either road surface or work area dust materials. Field samples were combined into five laboratory test samples representing surface dust material from each road surface (RS) and work area (WAS) and then split to test mass using a riffle-splitter in general accordance with ASTM D2013.

**Work Area 1 (WAS 1.1 through 1.3):** The first location that samples were acquired was an area that DTG uses to bury C&D waste and operate the MRF. For the working area samples (WAS), a 15'x15' square was marked out and split into four equal quadrants of 7.5'x7.5'. From each quadrant, a 1-foot-wide area was swept from one end of the quadrant to the other. Material was collected using a broom and an enclosed dustpan. The material was transported from the dustpan and into a Ziploc storage bag. Three locations were chosen within the first working area. Samples collected were WAS 1.1, WAS 1.2 and WAS 1.3. These samples were combined in HWA's lab prior to analysis. Material collected appeared to consist of imported crushed gravel and possibly some native soils. While sampling, trucks coming in from outside of the site were dumping construction waste and a haul truck, excavator and dozer from within the site were tracking around the areas sampled.

**Work Area 2 (WAS 2.1 through 2.4):** The second location was a working area where wood debris is stored. Three more 15'x15' squares were marked out and split into quadrants, with a 1-foot-wide swath swept from each quadrant. Wade Porter with YRCAA requested an additional sample be taken from an area that appeared to differ from the rest within the working area, possibly underlain with imported gravel while the majority of the working area surface was covered in wood debris and possibly native soils. Samples were collected using the same methods as WAS 1, and labelled WAS 2.1, WAS 2.2, WAS 2.3 and WAS 2.4. The samples were combined in HWA's lab prior to analysis. There was limited traffic through the working area during HWA's time on site, though it appeared trucks hauling wood debris travelled through the area to dump and haul trucks from within the DTG site travelled through the area.

**Road Sample 1 (RS 1.1 through RS 1.3):** The third location sampled was an unpaved compacted soil and gravel road used to transport material between different locations on site. For roadway samples (RS) two grade stakes were measured 1-foot apart on each side of the road with a string around each stake, crossing the road to mark out a 1-foot-wide section across the entire width of the road. Samples were collected using the same methods as WAS 1 and WAS 2. Three of these areas were sampled, resulting in samples RS 1.1, RS 1.2 and RS 1.3. These samples were combined in HWA's lab prior to analysis. Haul trucks made frequent trips through the area, hauling soil and gravel to the first working area.

**Road Sample 2 (RS 2.1 through 2.3):** The fourth location sampled was a compacted soil and gravel road used to transport material between different locations on site. For roadway samples (RS) two grade stakes were measured 1-foot apart on each side of the road with a string around each stake, crossing the road to mark out a 1-foot-wide section across the entire width of the road. Samples were collected using the same methods as described above. Three of these areas were sampled, resulting in field samples RS 2.1, RS 2.2 and RS 2.3. These samples were combined in HWA's lab prior to analysis. Haul trucks made frequent trips through the area, transporting soil and gravel to the first working area.

**Road Sample 3 (RS 3.1 and 3.2):** The fifth and final location sampled was a compacted soil and gravel road used to transport material between different locations on site. For roadway samples (RS) two grade stakes were measured 1-foot apart on each side of the road with a string around each stake, crossing the road to mark out a 1-foot-wide section across the entire width of the road. Samples were collected using the same methods as described above. Two of these areas were sampled (RS 3.1 and RS 3.2) rather than 3, as suggested by Wade Porter, due to safety concerns in order to minimize time spent within the roadway, which supported heavy traffic. These samples were combined in HWA's lab prior to analysis. Trucks bringing construction waste from outside of the site were travelling through the area as well as haul trucks transporting dirt and gravel from within the site.

### 4.1.2 Analysis Method

**Moisture Content of Soil:** The moisture content of the sample was determined in general accordance with ASTM D 2216. The indicated moisture content of the material is percentage by dry weight of soil. The results are shown on the Sieve Analysis of Aggregate Plots, Figures 1 through 5 in the HWA report, and Table 2 below.

**Sieve Analysis of Aggregate:** The particle size distribution of each sample was determined by dry sieving, in general accordance with ASTM C-136 as modified in Appendix C.2, which requires sieve shaking for 10-minute intervals until the difference between two successive pan weights is less than 3%. All the samples evaluated were shaken for 4 intervals of 10 minutes (40 minutes total) which is the maximum allowed per ASTM C-136 Appendix C.2, Section C.2.3, procedural step 7. The results are shown on the Sieve Analysis of Aggregate Plots, Figures 1 through 5 in the HWA report, and Table 2 below.

### 4.1.3 Site-Specific Silt Content Results

Sample		Moisture,	
Designation	Unified Soil Classification	%	Silt, %
RS-1	Brown, well-graded SAND with silt and gravel (SW-SM)	4.4	5.3
RS-2	Brown, well-graded SAND with gravel (SW)	3.2	4.5
RS-3	Light yellowish brown, well-graded SAND with silt and gravel (SW-SM)	3.8	6.8
WAS-1	Light yellowish brown, well-graded SAND with gravel (SW)	5.7	2.4
WAS-2	Brown, well-graded SAND with gravel (SW)	10.4	3.6

#### Table 2. Analysis Results Summary

New operational roads and the new perimeter road to Phase 2 will have gravel surfacing in accordance with Washington State Department of Transportation specifications for crushed surfacing and be maintained by DTG in the same manner as existing road which will result in similar silt percentages.

### 4.2 Particulate Matter

### 4.2.1 Anticipated Actual Emissions

Emissions from the LPL as currently configured were calculated from 2021 annual waste volumes that were entered into the Anderson Rock and Demolition Pit accounting system as inherited by DTG.

The emissions inventory contains emissions of fugitive particulate emissions due to vehicle use on unpaved roads and areas. Emissions due to diesel fuel consumption are not included in this application because these emissions are emitted by exempted nonroad engines and nonroad vehicles.

DTG accepted 512,794 yd<sup>3</sup> of demolition waste and 29,231 yd<sup>3</sup> of wood waste, for a total of 542,025 yd<sup>3</sup> of waste in 2021. C&D debris is assumed to have an average weight of 0.24 ton per yd<sup>3</sup>, based on <u>Converting C&D Debris from Volume to Weight A Fact Sheet for C&D Debris Facility Operators</u> published by the Florida Center for Solid & Hazardous Waste Management. Wood waste is assumed to have an average weight of 0.15 ton per yd<sup>3</sup>, based on <u>Construction and Demolition Debris Weight-to-Volume</u> <u>Conversion</u> published by WasteCap Resource Solutions, Inc. Thus, an estimated 123,071 tons of demolition waste and 4,385 tons of wood waste, for a total of 127,455 tons of waste were accepted during calendar year 2021.

Maximum likely annual waste acceptance rate was calculated by adding up the maximum of each type of waste accepted between 2015 and 2021, which resulted in a maximum of 124,584 tons of demolition waste and 4,795 tons of wood waste, for a total of 129,379 tons of waste.

Emission calculations for this section are for the LPL and include the MRF. Exported recycled commodities from the MRF typically do not generate additional vehicle trips because DTG haul vehicles delivering material to the site are typically the same vehicles hauling recyclables offsite for efficient back hauling. Therefore, there are no additional vehicle trips to remove recyclables.

The quarry crushed an average of 101,245 tons of rock in 2021 and 2022. Though some of this material is used onsite, if the entire amount is assumed to be exported off site in trucks with 10 yd<sup>3</sup> capacity, an average of 6,750 haul truck trips per year will be in addition to the LPL haul truck volumes. This is based on a haul density of 1.5 tons per yd<sup>3</sup>.

Haul distances are shown in Figure 8 and Figure 9 for Phase 2 and the quarry, respectively. Both routes use 0.63 miles of paved access along Rock Top Road. The remainder of each route is gravel surfaced at 0.76 and 0.57 miles for Phase 2 and the quarry, respectively.



Figure 8. Phase 2 Haul Distance



Figure 9. Quarry Haul Distance

Emission calculations are shown below:

#### 4.2.2 Haul Road

C&D debris, wood waste, and recyclable materials are brought into the LPL by haul trucks.

DTG has records for the number of inbound loads of waste, beginning in November 2015 to present. 16,964 loads were accepted during calendar year 2021.

The average volume of waste per load was 32.48 yd<sup>3</sup>, or 7.63 tons. Based on these averages, we assumed that the standard haul truck for the average load would be a roll-off truck, such as a Freightliner 114SD equipped with a Galfab 60K outside rail hoist system, transporting a 40-yd<sup>3</sup> dumpster.

Empty weight of a typical roll-off haul truck is 10 tons, and empty weight of a typical 40-yd<sup>3</sup> dumpster is 4 tons. Loaded weight of the haul truck and loaded 40-yd<sup>3</sup> dumpster is 21.6 tons. Average haul truck weight is 17.8 tons.

Assuming the typical weight of an empty dump truck for rock hauling is 13 tons, a loaded dump truck will have an additional 15 tons for a total 28 tons. The average rock haul truck weight is 20.5 tons.

The Phase 2 haul road is 1.39 miles long. The paved portion of the haul road extends 0.63 miles from Summitview Road to the blue gate near the PCS area. The remaining 0.76 miles from the blue gate to the LPL/MRF area is graveled. Round trip distances are 1.26 miles paved, 1.52 miles graveled.

The quarry haul road is 1.20 miles long. The paved portion of the haul road extends 0.63 miles from Summitview Road to the blue gate near the PCS area. The remaining 0.57 miles from the blue gate to the quarry area is graveled. Round trip distances are 1.26 miles paved, 1.14 miles graveled.

Vehicles traveling up the haul road arrive at the work area. The typical distance that vehicles travel within these work areas before traveling back down the haul road is estimated at 0.10 mile.

#### 4.2.3 Gravel Road Use by Haul Trucks

Both demolition and wood waste are brought into the LPL by haul trucks, therefore the graveled road use calculations are based on combined maximum likely acceptance rates. The calculation is also applied to crushed rock export trucks.

Emissions were calculated using Equation 1a, Section 13.2.2, AP-42:

$$E = k \times \left(\frac{s}{12}\right)^a \times \left(\frac{W}{3}\right)^b$$

Where:

E = size-specific emission factor (lb/VMT)

*s* = silt content, %

W = average vehicle weight, tons

*VMT* = vehicle miles traveled

The Equation 1a and 1b emission factors can be extrapolated to annual average uncontrolled conditions (but including natural mitigation) under the simplifying assumption that annual average emissions are inversely proportional to the number of days with measurable (more than 0.254 mm [0.01 inch]) precipitation:

$$E_{ext} = E \times \left[\frac{(365 - P)}{365}\right]$$

Where:

 $E_{ext}$  = annual size-specific emission factor extrapolated for natural mitigation (lb/VMT)

E = emission factor from Equation 1a or 1b of Section 13.2.2, AP-42

P = number of days in a year with at least 0.01 inch of precipitation

70 days with at least 0.01 inch of precipitation was found at the NOAA web site: <u>NOWData - NOAA</u> <u>Online Weather Data</u>, and is shown in Figure 4. Г

Monthly Number of Days Precipitation >= 0.01 for Yakima Area, WA (ThreadEx)													
	Chek countin heading to soft ascending, enek again to soft descending.												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	13	12	9	3	8	2	1	0	6	6	4	8	72
2001	6	11	6	7	1	7	1	2	2	3	9	12	67
2002	5	5	1	7	7	5	3	0	2	1	4	16	56
2003	12	3	6	13	5	0	0	5	1	5	2	19	71
2004	10	11	3	4	7	5	1	8	3	7	3	9	71
2005	11	2	3	9	12	3	1	1	2	7	7	13	71
2006	14	4	7	5	9	7	2	0	2	5	13	12	80
2007	5	7	4	8	4	6	1	1	3	6	9	11	65
2008	9	5	4	3	5	3	1	4	1	4	9	12	60
2009	5	5	7	4	5	4	1	2	4	8	4	8	57
2010	15	12	6	7	11	10	4	2	7	5	16	14	109
2011	8	4	13	2	10	4	4	0	2	8	5	4	64
2012	7	8	13	8	4	8	3	0	2	9	13	14	89
2013	2	1	7	3	5	4	0	4	8	2	5	1	42
2014	4	11	4	4	2	4	2	5	3	10	8	13	70
2015	6	8	5	0	3	1	2	1	1	8	8	18	61
2016	16	7	10	2	7	3	4	0	3	17	10	9	88
2017	13	11	14	12	6	3	0	3	3	3	15	8	91
2018	12	4	8	4	4	4	0	0	1	9	6	11	63
2019	8	15	6	7	6	2	2	5	6	6	2	8	73
2020	11	2	7	2	11	4	0	1	1	2	10	6	57
2021	13	7	3	2	2	4	0	2	М	М	М	М	М
Mean	9	7	7	5	6	4	2	2	3	6	8	11	70
Max	16	15	14	13	12	10	4	8	8	17	16	19	109
	2016	2019	2017	2003	2005	2010	2016	2004	2013	2016	2010	2003	2010
Min	2 2013	1 2013	1 2002	0 2015	1 2001	0 2003	0 2021	0 2018	1 2020	1 2002	2 2019	1 2013	42 2013

#### Figure 10. Monthly Number of Days Precipitation ≥ 0.01 inch for Yakima Area

Table 3 shows the constants used for calculating emissions from the emissions inventory as indicated in AP-42.

Constants	PM <sub>2.5</sub>	PM10	РМ
k, lb/VMT	0.15	1.5	4.9
а	0.9	0.9	0.7
b	0.45	0.45	0.45

#### Table 3. Particulate Matter Constants from Section 13.2.2 of AP-42

Silt content, *S*, for the gravel road was assumed to be 4.5 percent, which is the silt content for RS-2 from the HMA report. The Phase 2 LPL haul truck weight, *W*, was estimated to be 17.8 tons, using the 14.0-ton empty weight and 21.6-ton loaded weight, and that each haul truck drove one way empty and one way full. The quarry haul truck weight, *W*, was estimated to be 20.5 tons, using the 13.0-ton empty weight and 28.0-ton loaded weight, and that each haul truck drove one way empty and one way full. The calculated emission factor, *E*, was multiplied by the natural mitigation factor to the extrapolated emission factor, *E*<sub>ext</sub>. The average round trip on graveled road to Phase 2 is 1.52 miles, and the number of trips was calculated to be 16,964 trips per year. The Phase 2 number of trips per year was multiplied by miles per trip to obtain a VMT of 25,786 miles per year. The average round trip on graveled road to the quarry is 1.14 miles, and the number of trips was calculated to be 6,750 trips per year. The quarry number of trips per year was multiplied by miles per trip to obtain a VMT of 25,060 miles per trip to obtain a VMT of 7,695 miles per year. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures proposed in Section 4.3 below. Emissions due to haul truck use on the graveled portion of the haul road were calculated as shown in Table 4.

Phase 2	PM <sub>2.5</sub>	PM <sub>10</sub>	РМ
E, Ib/VMT	0.138	1.383	5.497
E <sub>ext</sub> , lb/VMT	0.117	1.118	4.443
lb/yr (uncontrolled)	3,019.2	28,824.2	114,566.2
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	603.8	5,764.8	22,913.2
Quarry			
E, Ib/VMT	0.147	1.473	5.856
E <sub>ext</sub> , lb/VMT	0.125	1.191	4.733
lb/yr (uncontrolled)	3,216.2	30,705.2	122,042.5
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	643.2	6,141.0	24,408.5

#### Table 4. Maximum Actual Emissions from Graveled Road Use by Haul Trucks

#### 4.2.4 Work Area Use by Haul Trucks

Equation 1a from Section 13.2.2 of AP-42 and the same constants as those in Table 3 were used to calculate emissions from haul trucks that are used in the quarry and at the LPL/MRF or wood debris waste deposition areas.

Silt content, *S*, was assumed to be 6.8 percent, which is the silt content for RS-3 from the HMA report. Average haul truck weight and natural mitigation factors were used as described above. The average round trip the work area is 0.10 mile, and the number of trips was calculated to be 16,964 trips and 6,750 trips per year for Phase 2 and the quarry, respectively. The number of trips per year was multiplied by miles per trip to obtain a VMT of 1,696 miles and 675 miles per year for Phase 2 and the quarry, respectively. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures. Emissions due to haul truck use on the graveled portion of the haul road were calculated as shown in Table 5.

Phase 2	PM <sub>2.5</sub>	PM <sub>10</sub>	PM
E, lb/VMT	0.201	2.005	7.339
E <sub>ext</sub> , lb/VMT	0.170	1.621	5.932
lb/yr (uncontrolled)	288.0	2,749.7	10,062.8
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	57.6	549.9	2,012.6
Quarry			
E, Ib/VMT	0.214	2.136	7.818
E <sub>ext</sub> , lb/VMT	0.181	1.727	6.319
lb/yr (uncontrolled)	306.8	2,929.1	10,719.5
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	61.4	585.8	2,143.9

#### Table 5. Maximum Actual Emissions from Work Area Use by Haul Trucks

#### 4.2.5 Work Area Use by Loaders

Equation 1a from Section 13.2.2 of AP-42 and the same constants as those in Table 3 were used to calculate emissions from wheel loaders that are used in the LPL/MRF waste deposition areas.

Silt content, *S*, was assumed to be 3.6 percent, which is the silt content for WAS-2 from the HMA report. Average loader weight between the Caterpillar 988G, 980M, and 962K used by DTG, 37.3 tons, plus an estimated weight of 2.0 tons per load, was used to calculate an average weight, W, of 38.3 tons. The calculated emission factor, *E*, was multiplied by the natural mitigation factor to the extrapolated emission factor, *E<sub>ext</sub>*. The average loader speed was estimated to be 5 miles per hour. The loader operates for about 25% of the 2,581 hours per year that the landfill is open, which is 645 hr/yr. Multiplying average loader speed by hours of operations gives the VMT of 3,226 miles per year. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures. Emissions due to loader operations were calculated as shown in Table 6.

	PM <sub>2.5</sub>	PM <sub>10</sub>	РМ
E, lb/VMT	0.160	1.597	6.638
E <sub>ext</sub> , lb/VMT	0.129	1.291	5.365
lb/yr (uncontrolled)	416.4	4,164.1	17,306.1
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	83.3	832.8	3,461.2

#### Table 6. Maximum Actual Emissions from Work Area Use by Loader

#### 4.2.6 Work Area use by Bullzozers

Equation 1a from Section 13.2.2 of AP-42 and the same constants as those in Table 3 were used to calculate emissions from the bulldozer when used during moving C&D debris across unpaved areas.

Silt content, *S*, was assumed to be 3.6 percent, which is the silt content for WAS-2 from the HMA report. Caterpillar D-8T weight, 42.3 tons, was used for *W*. The average bulldozer speed was estimated to be 2 miles per hour. The calculated emission factor, *E*, was multiplied by the natural mitigation factor to the extrapolated emission factor,  $E_{ext}$ . The bulldozer operates for about half the time that the landfill is open, and about half of that time on unpaved areas. Multiplying average bulldozer speed by hours of operations gives the VMT of 1,290 miles per year. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures. Emissions due to bulldozer operations were calculated as shown in Table 7.

	PM <sub>2.5</sub>	PM <sub>10</sub>	PM
E, lb/VMT	0.167	1.669	6.938
E <sub>ext</sub> , lb/VMT	0.135	1.349	5.607
lb/yr (uncontrolled)	174.1	1,740.7	7,234.6
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	34.8	348.1	1,446.9

#### Table 7. Maximum Actual Emissions from Work Area Use by Bulldozer

#### 4.2.7 Bulldozer Compacting C&D Debris

Equation 1a from Section 13.2.2 of AP-42 and the same constants as those in Table 3 were used to calculate emissions from the bulldozers when used during compaction of LPL demolition waste.

Silt content, *S*, was assumed to be 3.6 percent, which is the silt content for WAS-2 from the HMA report. Caterpillar D-8T weight, 42.3 tons, was used for *W*. The calculated emission factor, *E*, was multiplied by the natural mitigation factor to the extrapolated emission factor,  $E_{ext}$ . The average bulldozer speed was estimated to be 2 miles per hour. The bulldozer operates for about half the time that the landfill is open, and about half of that time on C&D debris. Multiplying average bulldozer speed by hours of operations gives the VMT of 1,290 miles per year. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures. Emissions due to bulldozer operations were calculated as shown in Table 8.

	PM <sub>2.5</sub>	PM <sub>10</sub>	РМ
E, lb/VMT	0.167	1.669	6.938
E <sub>ext</sub> , Ib/VMT	0.135	1.349	5.607
lb/yr (uncontrolled)	174.1	1,740.7	7,234.6
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	34.8	348.1	1,446.9

#### Table 8. Maximum Actual Emissions from C&D Compacting Use by Bulldozer

#### 4.2.8 Gravel Road Use by Light Trucks

Light trucks are used at the LPL/MRF for utility purposes. Almost all the VMT by light trucks at the LPL/RMF is on the haul road.

Emissions were calculated using Equation 1b, Section 13.2.2, AP-42:

$$E = \left(\frac{k \times \left(\frac{s}{30}\right)^d}{\left(\frac{M}{3}\right)^b}\right) - C$$

Where:

*E* = size-specific emission factor (lb/VMT)

s = silt content, %

*M* = surface moisture, %

C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear

VMT = vehicle miles traveled

Table 7 shows the constants used for calculating emissions from the emissions inventory as indicated in AP-42.

Constants	PM <sub>2.5</sub>	PM <sub>10</sub>	PM
k, lb/VMT	0.18	1.8	6
C, Ib/VMT	0.00036	0.00047	0.00047
A	1	1	1
C	0.2	0.2	0.3
d	0.5	0.5	0.3

Table 7. Particulate Matter Constants from Section 13.2.2 of AP-42

Moisture content, *M*, was assumed to be 3.2 percent, which is the moisture content for RS-3 from the HMA report. Silt content, *s*, was assumed to be 4.5 percent, which is the silt content for RS-3 from the HMA report. The calculated emission factor, *E*, was multiplied by the natural mitigation factor to the extrapolated emission factor, *E*<sub>ext</sub>. The average speed on unpaved roads was estimated to be 7 mph. VMT was estimated to be 7 mph times 10% of the time that the LPL is open, over the round trip distance of 1.52 miles per trip, or 921 miles per year. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures. Emissions due to light truck use on the graveled portion of the haul road were calculated as shown in Table 8.

Table 8. Maximum Actua	l Emissions from	<b>Graveled Road</b>	Use by Light Trucks
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	PM <sub>2.5</sub>	PM <sub>10</sub>	РМ
E, Ib/VMT	0.022	0.224	0.833
E <sub>ext</sub> , lb/VMT	0.018	0.181	0.673
lb/yr (uncontrolled)	16.5	167.1	620.1
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	3.3	33.4	124.0

### 4.2.9 Work Area Use by Light Trucks

Equation 1b from Section 13.2.2 of AP-42 and the same constants as those in Table 7 were used to calculate emissions from light trucks that are used in the LPL/MRF or wood debris waste deposition areas.

Moisture content, *M*, was assumed to be 3.8 percent, which is the moisture content for RS-1 from the HMA report. Silt content, *S*, was assumed to be 6.8 percent, which is the silt content for RS-3 from the HMA report. Average light truck weight and natural mitigation factors were used as described above. The average speed in the work areas was estimated to be 7 mph. VMT was estimated to be 7 mph times 10% of the time that the LPL is open, over the round trip distance of 0.10 mile per trip, or 121 miles per year. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures. Emissions due to haul truck use on the graveled portion of the haul road were calculated as shown in Table 9.

	PM <sub>2.5</sub>	PM10	PM
E, lb/VMT	0.032	0.328	1.195
E <sub>ext</sub> , lb/VMT	0.026	0.265	0.966
lb/yr (uncontrolled)	3.2	32.1	117.1
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	0.6	6.4	23.4

#### Table 9. Maximum Actual Emissions from Work Area Use by Light Trucks

#### 4.2.10 Paved Road Use by Haul Trucks

Both demolition and wood waste are brought into the LPL by haul trucks, therefore the paved road use calculations are based on combined maximum likely acceptance rates. The calculation is also applied to crushed rock export trucks.

Emissions were calculated using Equation 1, Section 13.2.1, AP-42:

$$E = k \times (sL)^{0.91} \times (W)^{1.02}$$

Where:

*E* = particulate emission factor (lb/VMT)

k = particle size multiplier, (lb/VMT)

sL = road surface silt loading (g/m<sup>2</sup>)

W = average vehicle weight, tons

The Equation 1a and 1b emission factors can be extrapolated to annual average uncontrolled conditions (but including natural mitigation) under the simplifying assumption that annual average emissions are inversely proportional to the number of days with measurable (more than 0.254 mm [0.01 inch]) precipitation:

$$E_{ext} = E \times \left[\frac{(365 - P)}{365}\right]$$

Where:

 $E_{ext}$  = annual size-specific emission factor extrapolated for natural mitigation (lb/VMT)

*E* = emission factor from Equation 1a or 1b of Section 13.2.2, AP-42

P = number of days in a hear with at least 0.01 inch of precipitation

70 days with at least 0.01 inch of precipitation was found at the NOAA web site: NOWData - NOAA Online Weather Data, and is shown in Figure 4.

Size range	Lb/VMT
PM <sub>2.5</sub>	0.00054
PM <sub>10</sub>	0.0022
PM (PM <sub>30</sub> used)	0.011

Table 10. Particulate Matter Constants from Section 13.2.2 of AP-42

Road surface silt loading, *SI*, for the paved road was assumed to be 8.2 g/m<sup>2</sup>, which is the mean silt loading for paved roads at a quarry, per Table 13.2.1-3 AP-42. The Phase 2 haul truck weight, *W*, was estimated to be 17.8 tons, using the 14.0-ton empty weight and 21.6-ton loaded weight, and that each haul truck drove one way empty and one way full. The quarry haul truck weight, *W*, was estimated to be 20.5 tons, using the 13.0-ton empty weight and 28.0-ton loaded weight, and that each haul truck drove one way empty and one way full. The calculated emission factor, *E*, was multiplied by the natural mitigation factor to the extrapolated emission factor, *E<sub>ext</sub>*. The average round trip on paved road is 1.26 miles, and the number of trips was calculated to be 16,964 trips and 6,750 trips per year for Phase 2 and the quarry, respectively. The number of trips per year was multiplied by miles per trip to obtain a VMT of 21,375 miles and 8,505 miles per year for Phase 2 and the quarry, respectively. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures. Emissions due to haul truck use on the paved portion of the haul road were calculated as shown in Table 11.

Phase 2	PM <sub>2.5</sub>	PM <sub>10</sub>	РМ
E, lb/VMT	0.069	0.282	1.408
E <sub>ext</sub> , Ib/VMT	0.066	0.268	1.341
lb/yr (uncontrolled)	1,407.0	5,732.2	28,660.9
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	281.4	1,146.4	5,732.2
Quarry			
E, lb/VMT	0.080	0.325	1.625
E <sub>ext</sub> , lb/VMT	0.076	0.309	1.547
lb/yr (uncontrolled)	1,623.8	6,615.3	33,076.6
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	324.8	1,323.1	6,615.3

#### Table 11. Maximum Actual Emissions from Paved Road Use by Haul Trucks

#### 4.2.11 Paved Road Use by Light Trucks

Light trucks are used at the LPL/MRF for utility purposes. Almost all the VMT by light trucks at the LPL/RMF is on the haul road.

Emissions were calculated using Equation 1a, Section 13.2.1, AP-42:

Road surface silt loading, *SI*, for the paved road was assumed to be 8.2 g/m<sup>2</sup>, which is the mean silt loading for paved roads at a quarry, per Table 13.2.1-3 AP-42. Light truck weight, *W*, was estimated to be 2.8 tons, which is a typical weight for a full-size pickup truck. The calculated emission factor, *E*, was multiplied by the natural mitigation factor to the extrapolated emission factor, *E*<sub>ext</sub>. The average speed in the work areas was estimated to be 7 mph. VMT was estimated to be 7 mph times 10% of the time that the LPL is open, over the round trip distance of 1.26 mile per trip, or 764 miles per year.. Control efficiency of 80 percent was taken from the DeAtley Crushing Company Dust Mitigation Plan and assumed for the dust control measures. Emissions due to light truck use on the graveled portion of the haul road were calculated as shown in Table 12.

Table 12. I	Maximum Actu	al Emission	s from Pay	ved Road U	se by Light Trucks

	PM <sub>2.5</sub>	PM <sub>10</sub>	РМ
E, Ib/VMT	0.010	0.282	1.408
E <sub>ext</sub> , Ib/VMT	0.010	0.268	1.341
lb/yr (uncontrolled)	7.5	204.8	1024.1
Control efficiency	80.0%	80.0%	80.0%
lb/yr (controlled)	1.5	41.0	204.8

#### 4.2.12 Wood Waste Tub Grinder

The wood waste tub grinder is a Hogzilla model TCII 1564P, powered by a 1,000 horsepower diesel engine. The tub grinder is mounted on a wheeled trailer and is moved about the facility periodically, so the diesel engine is a nonroad engine.

The emission factor for "Log Debarking" from a previous edition of the EPA's AP-42, Table 10.3-1 (0.24 lb PM/ton) was used to estimate total PM emissions.

The tub grinder will be equipped with a water spray dust suppression system; a control efficiency of 50% was assumed for PM, in accordance with Bay Area Air Quality Management (BAAQMD) Permit Handbook Chapter 11.13, "tub Grinders." Also, in accordance with the BAAQMD Permit Handbook Chapter 11.13, 60% of the total PM was assumed to be PM<sub>10</sub>. PM<sub>2.5</sub> was assumed to be 60% of PM<sub>10</sub>. Emission calculations are shown below.

	PM <sub>2.5</sub>	PM <sub>10</sub>	РМ
lb/ton	0.0864	0.144	0.24
lb/yr (uncontrolled)	414	690	1151
Control efficiency	50.0%	50.0%	50.0%
lb/yr (controlled)	207	345	575

#### Table 13. Maximum Actual Emissions Wood Waste Tub Grinder

#### 4.2.13 Wood Chip Pile

The emission factor for windblown dust from aggregate piles from Section 13.2.4 of AP-42 was used to estimate windblown dust from wood chip piles, using Equation 1 from Section 13.2.4 of AP-42:

$$E = k \times \left(\frac{U}{5}\right)^{1.3} \times \left(\frac{M}{2}\right)^{1.4}$$

Where:

E = Emission (lb/ton)

k = 0.0032

U = average wind speed, mph (15 mph is the high value taken from Section 13.2.4, AP-42)

M = material moisture, % (11% taken from fill materials at a municipal solid waste landfill, Section 13.2.4, AP-42

	· · · · · · · · · · · · · · · · · · ·			
	PM <sub>2.5</sub>	PM <sub>10</sub>	РМ	
lb/ton	0.00007	0.00043	0.00091	
lb/yr (uncontrolled)	0.31	2.06	4.35	
Control efficiency	50.0%	50.0%	50.0%	
lb/yr (controlled)	0.16	1.03	2.18	

#### Table 14. Maximum Actual Emissions Wood Chip Piles

#### 4.2.14 LPL Controlled Fugitive Dust Emissions Summary

Anticipated Actual controlled emissions from the LPL and quarry are summarized by category in Table 15.

	PM <sub>2.5</sub>	PM10	РМ
Haul trucks – Phase 2, gravel road use	0.30	2.88	11.46
Haul trucks – Quarry, gravel road use	0.32	3.07	12.20
Haul trucks – Phase 2, work area use	0.03	0.27	1.01
Haul trucks – Quarry, work area use	0.03	0.29	1.07
Haul trucks – Phase 2, paved road use	0.14	0.57	2.87
Haul trucks – Quarry, paved road use	0.16	0.66	3.31
Loaders, work area use	0.04	0.42	1.73
Bulldozers, work area use	0.02	0.17	0.72
Bulldozers, compacting C&D debris compaction	0.02	0.17	0.72
Light trucks, gravel road use	0.00	0.02	0.06
Light trucks, work area use	0.00	0.00	0.01
Light trucks, paved road use	0.00	0.02	0.10
Woodwaste Tub Grinder	0.10	0.17	0.29
Wood chip pile	0.00	0.00	0.00
Total	1.17	8.73	35.56

#### Table 15. Actual Emissions by Category, ton/yr

All emissions are classified as fugitive emissions. Annual emission rates were calculated from the maximum likely annual waste acceptance rate.

#### 4.2.15 Potential to Emit

Potential to emit (PTE) was calculated by scaling up anticipated actual emissions for the LPL/MRF by a factor or 3,768/2,600, which is allowable hours per year divided by normal operating hours. The quarry operation was not scaled up. This PTE is based on 757,981 yd<sup>3</sup> of material received at the site and 101,245 yd<sup>3</sup> of crushed rock export.

Potentials to Emit from the LPL and quarry are summarized by category in Table 16.

	PM <sub>2.5</sub>	PM <sub>10</sub>	PM
Haul trucks – Phase 2, gravel road use	0.44	4.21	16.73
Haul trucks – Quarry, gravel road use	0.32	3.07	12.20
Haul trucks – Phase 2, work area use	0.04	0.40	1.47
Haul trucks – Quarry, work area use	0.03	0.29	1.07
Haul trucks – Phase 2, paved road use	0.21	0.84	4.19
Haul trucks – Quarry, paved road use	0.16	0.66	3.31
Loaders, work area use	0.06	0.61	2.53
Bulldozers, work area use	0.03	0.25	1.06
Bulldozers, compacting C&D debris compaction	0.03	0.25	1.06
Light trucks, gravel road use	0.00	0.02	0.09
Light trucks, work area use	0.00	0.00	0.02
Light trucks, paved road use	0.00	0.03	0.15
Woodwaste Tub Grinder	0.15	0.25	0.42
Wood chip pile	0.00	0.00	0.00
Total	1.47	10.90	44.29

#### Table 16. PTE by Category Based on Permitted Operating Hours, ton/yr

The PTE below is proposed as a permit condition to set limits on annual material received at the facility and crushed rock exported from the facility. PTE was calculated by scaling up the Table 16 PTE emissions for the LPL/MRF by a factor or 1,000,000/757,981, which establishes an annual threshold for materials received at 1,000,000 yd<sup>3</sup> per year. The quarry operation threshold is set at 101,245 yd<sup>3</sup> of crushed rock export.

PTE from the LPL and quarry are summarized by category in Table 17.

	PM <sub>2.5</sub>	PM <sub>10</sub>	PM
Haul trucks – Phase 2, gravel road use	0.58	5.55	22.07
Haul trucks – Quarry, gravel road use	0.32	3.07	12.20
Haul trucks – Phase 2, work area use	0.06	0.53	1.94
Haul trucks – Quarry, work area use	0.03	0.29	1.07
Haul trucks – Phase 2, paved road use	0.27	1.10	5.52
Haul trucks – Quarry, paved road use	0.16	0.66	3.31
Loaders, work area use	0.08	0.80	3.33
Bulldozers, work area use	0.03	0.34	1.39
Bulldozers, compacting C&D debris compaction	0.03	0.34	1.39
Light trucks, gravel road use	0.00	0.03	0.12
Light trucks, work area use	0.00	0.01	0.02
Light trucks, paved road use	0.00	0.04	0.20
Woodwaste Tub Grinder	0.20	0.33	0.55
Wood chip pile	0.00	0.00	0.00
Total	1.78	13.10	53.13

#### Table 17. PTE by Category based on Volume Thresholds, ton/yr

All emissions are classified as fugitive emissions.

Potential emissions of PM<sub>2.5</sub> and PM<sub>10</sub>, pollutants for which there are ambient standards, are below their respective 10 tpy and 15 tpy threshold rates defined in WAC 173-400-030(30), so modeling of impacts from these pollutants is not considered to be mandatory.

Potential emissions of total PM are in excess of the 25 ton per year threshold, so a thirty-day public comment period is mandatory.

### 4.3 Hydrogen Sulfide

Hydrogen sulfide ( $H_2S$ ) gas can be emitted from both LPLs and municipal solid waste (MSW) landfills.  $H_2S$  emissions may be problematic at a landfill as they can cause odor, impact surrounding communities, or contribute to the formation of explosive conditions.  $H_2S$  emissions at LPLs have often been attributed to the disposal of gypsum drywall.

The United States Environmental Protection Agency (EPA) document *BMP to Prevent and Control H<sub>2</sub>S* and *Reduced Sulfur Gases at Landfills that Dispose of Gypsum Drywall*<sup>1</sup> was used to estimate H<sub>2</sub>S emissions from the LPL.

#### 4.3.1 Emission Factor Development

DTG does not separately quantify gypsum drywall accepted at the LPL. Average values given in *BMP to Prevent and Control* H<sub>2</sub>S and Reduced Sulfur Gases at Landfills that Dispose of Gypsum Drywall were used to estimate the amount of drywall deposited at the LPL.

- The average weight-based composition of discarded gypsum in construction and demolition debris (C&D debris) is approximately 10%. Field observations anticipate that actual quantities at the LPL are below this percentage.
- Gypsum is hydrated calcium sulfate (CaSO<sub>4</sub> •2H<sub>2</sub>O) and is the major component of gypsum drywall panels, which normally consists of 90% (by weight) gypsum and 10% backing paper.
- H<sub>2</sub>S is generally formed in a landfill environment through the reduction of sulfate (SO<sub>4</sub><sup>2-</sup>) due to action of sulfate-reducing bacteria (SRB).

Additional information on H<sub>2</sub>S emission factor is provided in Table 18.

<sup>&</sup>lt;sup>1</sup> Best Management Practices to Prevent and Control H<sub>2</sub>S and Reduced Sulfur Gases at Landfills that Dispose of Gypsum Drywall, EPA/600/R-14/039, August 2014
H <sub>2</sub> S Formation Factor	Discussion	DTG LPL Specifics
SO4 <sup>2-</sup> Source	Gypsum drywall, waste water treatment plant sludges, or other residential, commercial, or industrial wastes (e.g., auto shredder fluff impacted by lead-acid batteries)	The LPL only accepts permitted waste types. DTG is assumed to be average relative to other LPLs in this factor
Moisture	Moisture provides a medium for SRB growth and chemical reactions to occur. Infiltration of stormwater into the waste, lack of leachate collection and removal, and moisture inherent to deposed waste can all act to contribute to moisture within landfills.	Yakima gets 8 inches of rain and 24 inches of snowfall per year (equivalent to up to 2 inches of rain) <sup>2</sup> . The United States average is 30.2 inches per year <sup>3</sup> . Yakima gets about 25% of the national average, so the LPL is assumed to have lower than average potential for SRB reduction of $SO_4^{2^2}$ into H <sub>2</sub> S.
Organic Matter	Production of H <sub>2</sub> S requires organic matter as a substrate for SRB utilization. Organic matter presence in LPLs is not limiting, as the paper backing on drywall is sufficient to sustain a viable community of SRB that can produce H <sub>2</sub> S.	The LPL is assumed to be average in this factor.
Anaerobic Conditions	Anaerobic conditions (i.e., a lack of oxygen) are required for the reduction of SO <sub>4</sub> <sup>2-</sup> into H <sub>2</sub> S. Anaerobic conditions form within LPLs following placement and subsequent compaction of waste material.	The LPL is assumed to be average in this factor.
pH Conditions	SRB typically thrive in environments with pH ranging from 6 to 9. These pH conditions are consistent with those normally found in LPLs and MSW landfills.	The LPL is assumed to be average in this factor.
Temperature Conditions	SRB can thrive over a wide range of temperatures.	The LPL is assumed to be average in this factor.

#### Table 18. Summary of Factors that contribute to the production of H2S in LPLs

## 4.3.2 Gypsum Drywall and SO<sub>4</sub><sup>2-</sup> accepted at the LPL

The LPL accepted an estimated 123,071 tons of demolition waste in 2021. As discussed above in Section 4.2.1, the calculated maximum likely annual waste acceptance rate is 124,584 tons of demolition waste. Based on the average data from *BMP to Prevent and Control H*<sub>2</sub>*S and Reduced Sulfur Gases at Landfills that Dispose of Gypsum Drywall*, 10% of the total, or 12,458 tons, is assumed to be gypsum drywall.

According to BMP to Prevent and Control  $H_2S$  and Reduced Sulfur Gases at Landfills that Dispose of Gypsum Drywall, 90% of the drywall, or 11,213 tons, is gypsum (CaSO<sub>4</sub> • 2H<sub>2</sub>O).

The molecular weight of gypsum is 172.17 lb/lb-mole. The molecular weight of  $SO_4^{2-}$  is 96.0626 lb/lb-mole. Based on a ratio of their molecular weights, every ton of gypsum provides 0.558 ton of  $SO_4^{2-}$  for possible reaction by SRB. Therefore, we estimate that the LPL accepted 6,256 tons of  $SO_4^{2-}$  as the maximum annual.

<sup>&</sup>lt;sup>2</sup> Anderson Rock and Demolition Pits, Limited Purpose Landfill Application, April 27, 2015, Brown and Caldwell

<sup>&</sup>lt;sup>3</sup> Average Annual Precipitation by USA State - Current Results, National Oceanic and Atmospheric Administration

## 4.3.3 Emission Factor for H<sub>2</sub>S from LPLs

Hydrogen sulfide measurements from construction and demolition debris (C&D) landfills, Eun et al.  $(2007)^4$  measured the H<sub>2</sub>S flux from five LPLs (n = 20 measurements per site) in central Florida during the summer using a dynamic flux chamber. Measured flux rates ranged from 0.192 – 1.76 mg/m<sup>2</sup>-day.

As stated in Table 9, moisture provides a medium for SRB growth and conversion of  $SO_4^{2-}$  into  $H_2S$ . The average summer (June, July, and August) rainfall in Florida is 22.25 inches<sup>5</sup>, and the average rainfall during that same period in Yakima is 1.10 inches<sup>3</sup>. The annual average rainfall in Florida is 54.5 inches<sup>5</sup>, which is approximately 1.45 times the national average and 5.9 times the annual precipitation average in Yakima. Due to the different in precipitation between the study and the location of the DTG LPL the use of the data is conservative and thus the midpoint between low end and the high end of the flux range, 0.976 mg/m<sup>2</sup>-day, is a reasonably conservative value to use for  $H_2S$  flux from the LPL.

## 4.3.4 Anticipated Actual H<sub>2</sub>S Emissions

YRCAA required  $H_2S$  PTEs and, if necessary, ambient impacts modeling for both Phases 1 and Phase 2 of the LPL.

### 4.3.4.1 Phase 1 and Phase 2 Dimensions

Dimensions for Phase 1 and Phase 2, taken from engineering design drawings, are as follows:

Phase 1:	
Area, sqft	976,341.00
Area, square meters (m <sup>2</sup> )	90,705.01
Radius, m (AERSCREEN modeling was done using a circular area)	169.92
Height, m (Phase 1 is full, so full height is used in modeling)	23.71
Phase 2:	
Area, sqft	982,770.00
Area, square meters (m <sup>2</sup> )	91,302.28
Length, m (AERSCREEN modeling was done using a rectangular area)	573.71
Width, m	159.15
Height, m	17.45
Average height, m (average used to account for filling, from zero to full height)	8.73

#### 4.3.4.2 Anticipated Actual H<sub>2</sub>S Emission Rates from Phase 1 and Phase 2

Phase 1 and Phase 2 areas were multiplied by 0.976 mg/m<sup>2</sup>-day, to find anticipated actual  $H_2S$  emission rates. The  $H_2S$  emission rate from Phase 1 is 88,528 mg/day, which is equivalent to 0.195 lb/day. The  $H_2S$  emission rate from Phase 2 is 89,111 mg/day, which is equivalent to 0.196 lb/day. Taken separately or

<sup>&</sup>lt;sup>4</sup> Eun, S., Reinhart, D.R., Cooper, C.D., Townsend, T.G, Faour, A. (2007). Hydrogen sulfide measurements from construction and demolition debris (C&D) landfills. Waste Management. 27:220-227.

<sup>&</sup>lt;sup>5</sup> <u>http://www.usclimatedata.com/climate/florida/united-states/3179</u>

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together, emissions from exceed the WAC 173-460-150 small quantity emission rate (SQER) for  $H_2S$ , so impact modeling is required per WAC 173-460-080.

### 4.3.5 Potential to Emit H<sub>2</sub>S

PTE is the same as anticipated actual emissions, because the LPL will be emitting whether the facility is open or closed.

# 4.4 Toxic Air Pollutants Review per Chapter 173-460 WAC

Chapter 173-460 WAC applies to all sources with increases in toxic air pollutants (TAPs) listed in WAC 173-460-150. Table 19 shows the constants used for calculating emissions from the emissions inventory as indicated in AP-42.

	10.		into in olin Section	19:2:2 01 71 42	
		Averaging	ASIL	SQER (Ib/averaging	De Minimis
Common Name	CAS #	Period	(µg/m³)	period)	(lb/averaging period)
Hydrogen Sulfide	7783-06-4	24-hr	2	0.150	0.00743

### 4.4.1 Impacts Modeling Requirement

Taken separately or together, emissions from exceed the WAC 173-460-150 small quantity emission rate (SQER) for  $H_2S$ , so impact modeling is required per WAC 173-460-080.

### 4.4.2 Impact Modeling Procedure and Results

The EPA model AERSCREEN was used to model ambient impacts from Phases 1 and 2 of the DTG LPL. AERSCREEN is a screening model developed from the more sophisticated AERMOD model. AERSCREEN is designed to be easier to use than the AERMOD model. It is also designed to overpredict rather than underpredict ambient impacts, so it is generally expected that AERSCREEN results are more conservative than AERMOD results.

#### 4.4.2.1 Phase 1

A circular area was chosen due to the shape of the Phase 1 area of the DTG LPL, using a radius of 169.92 m. Height and initial vertical dimension were set at the average design height of 23.71 m. AERSCREEN output is a maximum  $H_2S$  ambient impact of 0.242  $\mu$ g/m<sup>3</sup>.

#### 4.4.2.2 Phase 2

A rectangular area was chosen due to the shape of the Phase 2 area of the DTG LPL, using a length of 573.71 m and a width of 159.15 m. Height and initial vertical dimension were set at 8.73 m, which is  $\frac{1}{2}$  of the average design height of 17.45 m. AERSCREEN output is a maximum H<sub>2</sub>S ambient impact of 0.815  $\mu$ g/m<sup>3</sup>.

#### 4.4.2.3 Combined Ambient Impact

AERSCREEN does not allow blending impact results, so AERSCREEN outputs were simply added, which is expected to yield extremely conservative ambient impact results. Combined AERSCREEN output for Phases 1 and 2 is a maximum H<sub>2</sub>S ambient impact of 1.06  $\mu$ g/m<sup>3</sup>. This is less than the WAC 173-460-150 ASIL of 2.0  $\mu$ g/m<sup>3</sup>. This means that the DTG LPL is meets the ambient impacts new source review requirements of Chapter 173-460 WAC.

# 5. BEST AVAILABLE CONTROL TECHNOLOGY

# 5.1 Best Available Control Technology for Unpaved Haul Roads and Unpaved Landfill Areas

The haul roads, unpaved areas, and the LPL and ancillary operations, such as the MRF, are subject to Best Available Control Technology (BACT) for particulate matter (PM, PM<sub>10</sub>, and PM<sub>2.5</sub>). EPA's RACT/BACT/LAER Clearinghouse, a database of previous determinations of BACT, contains several entries for control of fugitive dust from unpaved haul roads and areas. EPA has also prepared a "Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures" (EPA-450/2-92-004) which discusses control of fugitive dust from unpaved roads and unpaved areas. Fugitive dust control measures found in both of these sources can be distilled down to three main approaches:

- Source improvement (gravel or paving of roads, and planting vegetation in unpaved areas);
- Extent reduction (speed limits, traffic reduction); and
- Surface treatment (watering, chemical stabilization).

Unpaved areas at the LPL cannot be paved due to the nature of the landfill (weight/type of vehicles, and the mobile active face of the landfill). Speed is limited due to the size of the vehicles operating. Traffic onsite is limited to the vehicles necessary for operation. Water is applied to the unpaved roads and will continue to be applied as necessary.

# 5.2 BACT Proposal

DTG believes that the following proposal for BACT for the LPL is the top-ranked control option.

- Facility-wide:
  - > DTG will develop and implement a written dust mitigation plan for the LPL and the MRF, which will include the following emission controls described below.
  - All nonroad engines will use ultra-low sulfur diesel or ultra-low sulfur biodiesel (a sulfur content of 15 ppm or 0.0015% sulfur by weight or less), gasoline, natural gas, propane, liquefied petroleum gas (LPG), hydrogen, ethanol, methanol, or liquefied/compressed natural gas (LNG/CNG).
- Unpaved Areas and Graveled Roads:
  - > Water will be applied as necessary to prevent visible emissions.

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- > Vehicle speeds will be limited to 15 miles per hour.
- Mud or dirt track-out onto paved public roads will be minimized, and will be removed whenever observed.
- > Assumed control efficiency for unpaved road control measures: PM: 80%; PM<sub>10</sub>: 80%.
- Unpaved Areas:
  - > Water will be applied as necessary to prevent visible emissions.
  - > Soil disturbances in non-active portions of the LPL will be minimized.
  - > Native vegetation will be restored in areas of the LPL that become permanently closed.
  - > Assumed control efficiency for the unpaved area measures: PM: 80%; PM<sub>10</sub>: 80%.
- Tub Grinder and Wood Chip Piles
  - Fine mist water sprayers will be used at the tub inlet and wood chip conveyor as necessary to control release of dust during operation of the tub grinder during periods of no precipitation.
  - Fine mist water sprayers will be used on the wood chip piles as necessary to control release of dust during periods of no precipitation.
  - Assumed control efficiency for windblown dust from the tub grinder and wood chip pile measures: PM, PM<sub>10</sub>: 50%.

# 6. PETROLEUM CONTAMINATED SOIL

As stated previously, DTG will submit an additional Notice of Construction application prior to accepting any new PCS, so there will be no new emissions from this emission unit.

# 7. APPLICABLE REGULATIONS

## 7.1 Yakima Regional Clean Air Agency

While all of Regulation 1 of the YRCAA applies, the sections cited below have the most direct bearing on operations at the DTG facility.

**Section 3.08.A.4 Specific Dust Controls.** Paragraphs a through e refer to requirements that have been deleted and replaced with comparable requirements in WAC 173-400 (see Section 6.2 below). Section 3.08.A.4.f requires that any person doing road construction or repair have an adequate supply of water available to control dust at all times. Section 3.08.A.4.g requires a dust control plan, as follows:

- g. Site or Project Dust Control Plans. Where the potential exists for fugitive dust emissions, an owner or operator must prepare a site dust control plan and submit it to the authority 15 days prior to the start of any work that will disturb soil stability, cover, or cause fugitive dust emissions.
  - 1) Dust control plans must identify management practices and operational procedures which will effectively control fugitive dust emissions.

- 2) Dust control plans must contain the following information:
  - a) A detailed map or drawing of the site;
  - b) A description of the water source to be made available to the site, if any;
  - c) A description of preventive dust control measures to be implemented, specific to each area or process;
  - d) A description of contingency measures to be implemented in the event any of the preventive dust control measures become ineffective;
  - e) A statement, signed by the owner or operator of the site, accepting responsibility for the implementation and maintenance of the dust control plan;
  - f) The name and telephone number of person(s) available 24 hours a day to mitigate any episodes of dust emissions; and
  - g) If the ownership or control of all or part of the site changes, the plan must be resubmitted by the new party and approved by the authority.
- 3) The authority will review the plan and either approve or require modification of the plan.
- 4) An owner or operator must implement effective dust control measures outlined in approved plans.

**Section 4.01.F.3 Operational and Maintenance Plan.** Owners or operators of registered air contaminant sources must develop and maintain an operation and maintenance plan for process and control apparatus. The plan must:

- a. Reflect good industrial practice;
- b. Include a record of performance and periodic inspections of process and control apparatus;
- c. Be reviewed and updated by the source owner or operator at least annually, and
- d. Be made available to the authority upon request.

### 7.2 Washington Administrative Code

WAC 173-400-035(1): Applicability. This section applies to any nonroad engines as defined in WAC 173-400-030, except for:

- (a) Any nonroad engine that is:
  - (i) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function; or
  - (ii) In or on a piece of equipment that is intended to be propelled while performing its function.
- (b) Nonroad engines with a cumulative maximum rated brake horsepower of 500 BHP or less.
- (c) Engines being stored in work centers, garages, or engine pool sites prior to being dispatched to the field for use and that do not provide back-up power at the work center, garage, or engine pool. Such engines may be operated at these facilities only for the purpose of engine maintenance, testing, and repair.

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WAC 173-400-035(2): Nonroad engines are not subject to:

- (a) New source review.
- (b) Control technology determinations.
- (c) Emission limits set by the state implementation plan (SIP).

**WAC 173-400-035(3):** Fuel standards. All nonroad engines must use ultra-low sulfur diesel or ultra-low sulfur bio-diesel (a sulfur content of 15 ppm or 0.0015 percent sulfur by weight or less), gasoline, natural gas, propane, liquefied petroleum gas (LPG), hydrogen, ethanol, methanol, or liquefied/compressed natural gas (LNG/CNG). A facility that receives deliveries of only ultra-low sulfur diesel or ultra-low sulfur bio-diesel is deemed to be compliant with this fuel standard.

**WAC 173-400-040(2):** No person shall cause or allow the emission for more than three minutes, in any one hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds twenty percent opacity except when the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed twenty percent.

**WAC 173-400-040(3):** Fallout. No person shall cause or allow the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

**WAC 173-400-040(5):** Odors. Any person who shall cause or allow the generation of any odor from any source or activity which may unreasonably interfere with any other property owner's use and enjoyment of his property must use recognized good practice and procedures to reduce these odors to a reasonable minimum.

**WAC 173-400-040(6):** Emissions detrimental to persons or property. No person shall cause or allow the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.

**WAC 173-400-040(8):** Concealment and masking. No person shall cause or allow the installation or use of any means which conceals or masks an emission of an air contaminant which would otherwise violate any provisions of this chapter.

**WAC 173-400-040(9):** The owner or operator of a source or activity that generates fugitive dust must take reasonable precautions to prevent that fugitive dust from becoming airborne and must maintain and operate the source to minimize emissions.

**WAC 173-400-110:** The YRCAA has adopted the Department of Ecology's regulation for new source review (NSR) for sources and portable sources, which can be found at WAC 173-400-110.

**WAC 173-400-111:** Processing notice of construction applications for sources, stationary sources and portable sources. This rule describes the permitting process and is available at WAC 173-400-111.

**WAC 173-400-112:** New sources in attainment or unclassifiable areas—Review for compliance with regulations. This rule sets forth requirements for new or modified sources in areas of the YRCAA that are in attainment or unclassified with regard to ambient air quality standards. This rule is available at WAC 173-400-113.

**Chapter 173-401 WAC:** This chapter establishes the elements of a comprehensive Washington State air operating program consistent with the requirements of Title V under the Federal Clean Air Act.

WAC 173-401-200(19) "Major Source": means any stationary source (or any group of stationary sources) that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control) belonging to a single major industrial grouping and that are described in (a), (b), or (c) of this subsection.

(b) For the purposes of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same major group (i.e., all have the same two-digit code) as described in the *Standard Industrial Classification Manual*, 1987. A major stationary source of air pollutants, as defined in section 302 of the FCAA, that directly emits or has the potential to emit, one hundred tpy or more of any air pollutant subject to regulation (including any major source of fugitive emissions of any such pollutant). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of this section, unless the source belongs to one of the following categories of stationary source:

- (i) Coal cleaning plants (with thermal dryers);
- (ii) Kraft pulp mills;
- (iii) Portland cement plants;
- (iv) Primary zinc smelters;
- (v) Iron and steel mills;
- (vi) Primary aluminum ore reduction plants;
- (vii) Primary copper smelters;
- (viii) Municipal incinerators capable of charging more than two hundred fifty tons of refuse per day;
- (ix) Hydrofluoric, sulfuric, or nitric acid plants;
- (x) Petroleum refineries;
- (xi) Lime plants;
- (xii) Phosphate rock processing plants;
- (xiii) Coke oven batteries;
- (xiv) Sulfur recovery plants;
- (xv) Carbon black plants (furnace process);
- (xvi) Primary lead smelters;
- (xvii) Fuel conversion plants;
- (xviii) Sintering plants;
- (xix) Secondary metal production plants;
- (xx) Chemical process plants;

(xxi) Fossil-fuel boilers (or combination thereof) totaling more than two hundred fifty million British thermal units per hour heat input;

(xxii) Petroleum storage and transfer units with a total storage capacity exceeding three hundred thousand barrels;

DTG Recycle - Yakima Facility New Source Review Application Additional Information DTG Recycle

(xxiii) Taconite ore processing plants;

(xxiv) Glass fiber processing plants;

(xxv) Charcoal production plants;

(xxvi) Fossil-fuel-fired steam electric plants of more than two hundred fifty million British thermal units per hour heat input; or

(xxvii) All other stationary source categories, which as of August 7, 1980, were being regulated by a standard promulgated under section 111 or 112 of the FCAA;

**Chapter 173-460 WAC:** This chapter establishes the systematic control of new or modified sources emitting toxic air pollutants (TAPs).

# 7.3 Federal

**Subpart WWW of 40 CFR 60—Standards of Performance for Municipal Solid Waste Landfills.** *Not applicable* because the DTG LPL is not a municipal solid waste (MSW) landfill.

Subpart AAAA of 40 CFR 63—National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills. *Not applicable* because the DTG LPL is not a municipal solid waste (MSW) landfill.

Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. *Not applicable* because the DTG LPL does not have any stationary compression ignition (CI) internal combustion engines that are applicable to this subpart.

Subpart JJJJ of 40 CFR 63—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. *Not applicable* because the DTG LPL does not have any stationary spark ignition (SI) internal combustion engines that are applicable to this subpart.

Subpart ZZZZ of 40 CFR 63—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. *Not applicable* because the DTG LPL does not have any stationary reciprocal internal combustion engines (RICE) that are applicable to this subpart.

# 8. PUBLIC NOTICE REQUIREMENT

Public notice should not be required because the application does not ask for or require any of the actions subject to a mandatory public comment period per WAC 173-400-171(3).

# 9. OPERATING PERMIT OR PSD

The DTG facility does not meet major source criteria for the air operating permit program under 40 CFR 70 or the Prevention of Significant Deterioration (PSD) program under 40 CFR 52.21.

# Appendix A

Yakima Regional Clean Air Agency New Source Review Forms - LPL



# Yakima Regional Clean Air Agency INSTRUCTIONS FOR PERMIT APPLICATION

#### Use this sheet as a checklist to determine when your application is substantially complete.

Each PERMIT APPLICATION for the construction, installation or establishment of a new air contaminant source, or modification of existing air pollution source or control equipment or permit, needs to be accompanied by the following information to be considered complete:

Included N/A

- $\square$  Process flow sheets and equipment layout diagrams.
- □ Ճ Control equipment manufacturer, model number, size, serial numbers (for each piece of control equipment).
- 🕱 🗖 Quantify average and maximum hourly throughput values, average yearly totals, and maximum concentrations for each pollutant.
- Applicant's calculation of the kinds and amounts of emissions for each emission point, materials handling operation or fugitive category (both controlled and uncontrolled).
- Plot plan including identification of proposed emission points to the atmosphere, distance to property boundaries, height of buildings and stack height above ground level.
- Identification of raw materials and/or product specifications (physical and chemical properties) and typical ranges of operating conditions as related to each emission point (toxic air contaminants require a separate summary); Material Safety Data Sheets (MSDS) should be included in the PERMIT APPLICATION for all compounds used.
- Identification of the methods/equipment proposed for prevention/control of emissions to the atmosphere.
- Information sufficient to demonstrate the ability of the emission controls proposed as being consistent with those provided in the applicable regulations (BACT/NSPS/RACT/NESHAPS/LAER analysis). See attached worksheet for typical layout of BACT analysis information.
- □ X The kinds and amounts of emission offset credits proposed for assignment when operations are within a non-attainment boundary (see WAC 173-400-120 and 131).
- Estimates of the proposed project ambient impact under average and least favorable conditions where pertinent to PSD (WAC 173-400-720) or Toxic Air Pollutants (WAC 173-460) requirements.
- Additional information, evidence, or documentation as required by the Board of Directors, or the Control Officer, to show that the proposed project will meet federal, state and local air pollution control regulations.
- For applications that include equipment that has previously been approved, authorized or registered, a lapse is considered to have occurred if the registration fees are delinquent for more than one calendar year or the source has not operated within five years prior to the receipt of any required PERMIT APPLICATION (WAC 173-400-110).
- Applications that include previously approved or authorized equipment require that additional information regarding previous owners or approvals be provided so that YRCAA records can be updated. Equipment registered and/or approved for a given company cannot be authorized without a legal name change, purchase of company or equipment, or a legal contract or subcontract to do business with or for the approved source. Responsibility for operation of authorized equipment rests with the registered source.
- All applications need to be accompanied with a completed SEPA checklist or SEPA determination. YRCAA may process the SEPA determination, if no other agency has done it. In this case a SEPA checklist with the proper fees must be submitted with the NSR application.
- The application transmittal shall conform to YRCAA review requirements wherever possible as detailed in the General Regulations for Air Pollution Sources (WAC 173-400).
- Each drawing, document, or other form of transmittal considered by the applicant to be proprietary and confidential must be suitably identified as confidential in red ink, and signed and dated by the applicant or its agent. Be aware that YRCAA follows the requirements in 40 CFR 2 for determination of confidentiality. YRCAA may not process company sensitive information as confidential.
- Orders of Approval (to construct, modify, or install) are issued for specific equipment or processes described in the application. Changes to the processes or control equipment are not allowed without new source review (Permit Application and Permit) if these changes result in an emission of a different type or an increase in emissions (WAC 173-400-110). Process equipment changes that result in decreased emissions require notification to YRCAA.
- The SIC code is identified as the four digit major group classification in the 1987 Standard Industrial Code Classification Manual listing of SIC codes can be obtained for free from the internet.
- Mail or deliver in person the completed application package to:

Yakima Regional Clean Air Agency 186 Iron Horse Court, Suite 101 Yakima, WA 98901-2303

- Application fees must accompany application for the application to be considered complete. An invoice will be sent out for the Engineering review after final decision on the application. Make checks payable to "Yakima Regional Clean Air Agency" or "YRCAA".
- The PERMIT APPLICATION package submitted must be complete. All applications are screened for completeness before processing. Applicants submitting incomplete application packages will be notified of their incomplete status and may result in a delay in processing the application.

# Yakima Regional Clean Air Agency

#### PERMIT APPLICATION / NEW SOURCE REVIEW

#### BACT ANALYSIS WORKSHEET

### Facility Name: DTG Recycle - Limited Purpose Landfill

Date:

-									
CONTROL ALTERNATIVE	EMISSIONS [lbs/hr] & [tons/yr]	EMISSIONS REDUCTION (a) [tons/yr]	INSTALLED CAPITAL COST (b) [\$]	TOTAL ANNUALIZED COST (c,g) [\$]	AVERAGE COST EFFECTIVENESS OVER BASELINE (d) [\$/ton]	INCREMENTAL COST EFFECTIVENESS (e) [\$/ton]	ENERGY INCREASE OVER BASELINE (f) [mmBtu/yr]	TOXICS IMPACT [Yes/No]	ADVERSE ENVIRONMENTAL IMPACT [Yes/No]
<sup>1)</sup> Fugitive dust controls described in NSR application	PM 39.82 ton/yr PM10 9.73 ton/yr PM2.5 1.37 ton/yr	PM 290.37 ton/y PM10 74.49 ton PM2.5 8.63 ton/	r /yr yr						
2)	•								
3)									
4)									
5) Uncontrolled Baseline (worst case - no controls)	PM 330.19 ton/yr PM10 84.22 ton/yr PM2.5 10.00 ton/yr								

(a) Emissions reduction over baseline control level.

(b) Installed capital cost relative to baseline.

- (c) Total annualized cost (capital, direct, and indirect) of purchasing, installing, and operating the proposed control alternative. A capital recovery factor approach using a real interest rate (i.e., absent inflation) is used to express capital costs in present-day annual costs.
- (d) Average cost effectiveness over baseline is equal to total annualized cost for the control option divided by the emissions reductions resulting from the uncontrolled baseline.
- (e) The optional incremental cost effectiveness criterion is the same as the average cost effectiveness criteria except that the control alternative is considered relative to the next most stringent alternative rather than the baseline control alternative.
- (f) Energy impacts are the difference in total project energy requirements with the control alternative uncontrolled baseline expressed in equivalent millions of Btus per year.
- (g) Assumptions made on catalyst life may have a substantial affect upon cost effectiveness.

#### Notes:

The number of alternatives to be evaluated will vary depending on application.

Values for each variable should be provided as they are applicable. Use N/A if not applicable.

Emission rates are the expected or predicted emission rates.

Calculations should provide for a range of alternatives.

Emissions reduction should use estimated efficiency if actual efficiency is unknown - should so state.

Attach worksheets as necessary to substantiate above values.

VAKIMA REGIONAL CLEAN AIR AGENCY	186 Iron Horse Court, Suite 101. Yakima, WA. 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org
*Pursuant to WAC 173-400-111(1) (e)-an application is not cor	<b>Filing Fee: \$400.00*</b> nplete until the permit application filling fee required by YRCAA has been paid.
OFFICAL USE ONLY	
YRCAA NSR No:	Date Fee Paid:
Received by: Filing	g Fee: <b>\$400.00</b>
□ YRCAA is the lead agency for the SEPA process. Proc	essing Fee \$400.00
<u>Review of the application will not begin, until the application fill</u> and processing the application for approval will be invoiced after	ing fee is paid. A surcharge fee for the time required for preparing
New Source Review (N Stationary/F	SR) Application General
INSTALLATION OR ESTABLISHMENT O	F NEW AIR CONTAMINANT SOURCES
NSR Application is Required for Construction, Ins	tallation or Establishment of an Air Pollution Source
Replacement or Substantial Alteration of Emission Con	trol Technology on an Air Pollution Source or Equipment
I. General Information:	
BUSINESS NAME DTG Recycle	
NATURE OF BUSINESS Limited purpose landfill, material	recovery facility, waste wood chipping
MAILING ADDRESS 41 Rocky Top Road, Yakima, Wa	A 98908
FACILITY ADDRESS (if different):	
PHONE and FAX NUMBERS ( 425) 523-8385 office, (42	5) 408-2186 cell Email: mike@dtgrecycle.com
TYPE OF PROCESS, EQUIPMENT, OR APPARATUS	veral mobile and nonroad engine powered vehicles.
Tub grinder and diesel generator on MRF conveyor powered	I by nonroad engines.
LIST OF AIR CONTAMINANT(S) WHICH WILL BE PRO	ODUCED AND/OR CONTROLLED Particulate matter
fugitive dust will be controlled at the site by watering the tub g	grinder, MRF material piles, wood chip piles, and roadways,
and application of cover soil. Watering will be limited to surfa	ce material only
ESTIMATED STARTING DATE: Accepting C&D waste si	nce 1997; LPL start year 2007; LPL expansion year 2015
ESTIMATED COMPLETION DATE:	
LPL is "limited purpose landfill," with no biodegradable or h	azardous materials placed in the LPL.

Compliance with SEPA	(State Environmental	Policy Act) - Check	One of the Options Below:
----------------------	----------------------	---------------------	---------------------------

- A DNS or EIS has been Issued by Another Agency for this Project and a Copy is Attached.
- □ If no DNS or EIS Exists for this Project, a Completed Checklist for this Project and the SEPA Processing Fee are Attached. *YRCAA SEPA checklist is available by phone, or by our website.*
- $\hfill\square$  The city/county has established an exemption for this project.
- I certify that the SEPA has been satisfied or this project is exempt:

April 29, 200	9 by Gary M. Cuil	ier, Hearing Examin	er, Yakima County (Fil	le No. CUP 08-074)
Previous NSR/A	Air Permits Number issued I	y YRCAA for the F	acility, if any	
Describe Input	to Output Process (Attach d	awings, schematics,	prints, or block diagra	ams) DTG currently operates
a surface mine,	PCS treatment facility, and	a 125-acre LPL site	licensed under Yakim	a Health District and Department of
Ecology.				
ESTIMATED C	COSTS: OF BASIC SOU	RCE EQUIPMENT	\$	
	OF CONTAMIN	ANT CONTROL A	PPARATUS \$	
Process: Produ	ction Output per Vear (tops	pounds etc.) 512 79	4 cuvd (approx 123 0	)71 ton) demo waste in 2021
1100055. 11000	ction Output per Tear (tons	29.23	1 cuvd (approx. 4.385	ton) wood waste in 2021
Perce	ntage of Production (%)		<u> </u>	
	Dec - Feb	%	Mar – May	25%
	Jun - Aug	%	Sep - Nov	25%
Opera	ting Schedule: Hrs/Day <u>10</u> Actua	/ 12 I / Allowed in DOH pr	Days/Wk <u>5 / 6</u> ermit	Wks/Yr <u>52 / 52</u>
II. Emiss	sions Estimations and	Calculations:		
1. Crite	ria Pollutants (gr/dscf. tons	vr. lbs/hr., ppm. etc.	)	
	Doutionlate (DM DM )	2M: 39 82 tov: PM10	) 9 73 tov: PM2 5: 1 3	7 tov
	Particulate $(PM_{10}, PM_{2.5})$			
	Volatile Organic Compoun	ds		
	Nitrogen Oxides			
	Sulfur Oxides			
	Carbon Monoxide			
	Lead			
2.	Toxic Air Pollutants (Name	;)	Quantity (in gr/dscf,	, tons/yr, lbs/hr. ppm, etc.)

4.	Air Pollution Modeling	
	Computer Printout Attached? []Yes	□No
Fmi	ssion Data.	
1 Sta	ack Height (Feet)	Inside Diameter (feet)
1. 50	Gas Exit Temp (degrees F)	Gas Exit Velocity (ft/min)
	Flow Rate (cfm)	
	Shared Stack? If a shared stac	
	Distance from Stack to Prope	rty Line
2. Di	Distance from Stack to Prope scharge Point or points (if no stack or ot	rty Line her than stack)
2. Di	Distance from Stack to Prope scharge Point or points (if no stack or ot Height (feet)	rty Line her than stack) Inside Diameter (feet)
2. Di	Distance from Stack to Prope scharge Point or points (if no stack or ot Height (feet) Gas Exit Temp (degrees F)	rty Line her than stack) Inside Diameter (feet) Gas Exit Velocity (ft/min)
2. Di	Distance from Stack to Proper scharge Point or points (if no stack or othe Height (feet) Gas Exit Temp (degrees F) Flow Rate (cfm) Shared discharge point? If a start	rty Line
2. Di	Distance from Stack to Proper scharge Point or points (if no stack or othe Height (feet) Gas Exit Temp (degrees F) Flow Rate (cfm) Shared discharge point? If a state the discharge point	rty Line Inside Diameter (feet) Gas Exit Velocity (ft/min) shared discharge point, identify process (es) or point(s) w
2. Di	Distance from Stack to Proper scharge Point or points (if no stack or othe Height (feet) Gas Exit Temp (degrees F) Flow Rate (cfm) Shared discharge point? If a state the discharge point Distance from discharge point	rty Line Inside Diameter (feet) Gas Exit Velocity (ft/min) shared discharge point, identify process (es) or point(s) w t to Property Line
<ol> <li>Di</li> <li>3. Fu</li> </ol>	Distance from Stack to Proper scharge Point or points (if no stack or othe Height (feet) Gas Exit Temp (degrees F) Flow Rate (cfm) Shared discharge point? If a state discharge point Distance from discharge point el Type	rty Line Inside Diameter (feet) Gas Exit Velocity (ft/min) Gas Exit Velocity (ft/min) shared discharge point, identify process (es) or point(s) w t to Property Line
2. Di 3. Fu	Distance from Stack to Proper scharge Point or points (if no stack or of Height (feet) Gas Exit Temp (degrees F) Flow Rate (cfm) Shared discharge point? If a st the discharge point Distance from discharge point el Type% Ash	rty Line Inside Diameter (feet) Gas Exit Velocity (ft/min) shared discharge point, identify process (es) or point(s) w t to Property Line % Sulfur Unit of Measure (gal./cu.ft./etc.)
2. Di 3. Fu	Distance from Stack to Proper scharge Point or points (if no stack or of Height (feet) Gas Exit Temp (degrees F) Flow Rate (cfm) Shared discharge point? If a st the discharge point Distance from discharge point el Type % Ash BTU per Unit of Measure	rty Line Inside Diameter (feet) Gas Exit Velocity (ft/min) shared discharge point, identify process (es) or point(s) w t to Property Line % Sulfur Unit of Measure (gal./cu.ft./etc.) Consumption Units per Year
2. Di 3. Fu	Distance from Stack to Proper scharge Point or points (if no stack or of Height (feet) Gas Exit Temp (degrees F) Flow Rate (cfm) Shared discharge point? If a st the discharge point Distance from discharge point el Type % Ash BTU per Unit of Measure Maximum Consumption Unit	rty Line Inside Diameter (feet) Gas Exit Velocity (ft/min) Gas Exit Velocity (ft/min) Gas Exit Velocity (ft/min) substance discharge point, identify process (es) or point(s) w to Property Line to Property Line % Sulfur % Sulfur Unit of Measure (gal./cu.ft./etc.) Consumption Units per Year s per Hour s per Hour
<ol> <li>Di</li> <li>Tu</li> <li>Fu</li> <li>Fu</li> </ol>	Distance from Stack to Proper scharge Point or points (if no stack or of Height (feet) Gas Exit Temp (degrees F) Flow Rate (cfm) Shared discharge point? If a the discharge point Distance from discharge point el Type % Ash BTU per Unit of Measure Maximum Consumption Unit	rty Line Inside Diameter (feet) Gas Exit Velocity (ft/min) shared discharge point, identify process (es) or point(s) w t to Property Line % Sulfur Unit of Measure (gal./cu.ft./etc.) Consumption Units per Year s per Hour

# **IV.** Air Pollution Control Equipment:

Baghouse	Туре	Model #, Serial #
	Efficiency PM <sub>2.5</sub> :	and PM <sub>10</sub> :
	Bag Height (feet)	Bag Diameter (feet)
	Filter Area (feet squared)	Blower Flow Rate (cfm)
	Filter Media	Dimensions (feet)
	Discharge Area Dimensions (feet)	
	Cleaning Mechanism (shake) (air psi)	
	Other Data	
Scrubber	Туре	Model #, Serial #
	Efficiency	
	Gas Differential Pressure (psi)	Liquor Differential Pressure (psi)
	Liquor Flow (gpm)	Discharge Area Dimensions (feet <sup>2</sup> )
	Gas Flow (cfm)	Other Data
Cyclone	Туре	Model #, Serial #
	Efficiency PM <sub>2.5</sub> :	and PM <sub>10</sub> :
	Gas Flow (cfm)	Discharge Area Dimensions (feet <sup>2</sup> )
	Other Data	
Precipitator	Туре	Model #, Serial #
	Efficiency	
	Gas Flow (cfm)	Gas Velocity (ft/sec)
	Residence Time	Gas Differential Pressure (psi)
	Precipitation Rate (ft/sec)	Discharge Area Dimensions (feet <sup>2</sup> )
	Other Data	
Ad/Absorp	Туре	Model #, Serial #
	Efficiency	
	Gas Flow	Gas Velocity (ft/sec)
	Gas Temp (degree F)	Bed Volume (ft <sup>3</sup> )
	Bed Dimensions (feet)	Capacity (hours)
	Contaminant (lb/day)	Regeneration time (hours)
	Bed Dimensions (feet) Contaminant (lb/day)	Capacity (hours) Regeneration time (hours)

		Туре	Model #, Serial #
		Efficiency	
		Gas Flow (cfm)	Discharge Area Dimensions (feet)
		Other Data	
• 7			
V.	Add	itional Information:	
	1.	Attach Related Information on Chen	nicals or Materials that will be emitted. (MSDS Sheets, Company
		Information, etc.)	
		Note: Indicate how much quantity an	re used per MSDSs
		$\Box$ Yes $\Box$ No, if not why?	
	2.	Fugitive Dust Control Plan (Attach	if Necessary)
	3.	Attach Operation and Maintenance	Manual of Pollution Control Equipment.
		$\Box$ Yes $\Box$ No, if not, why?	
	4.	Attach Vendor Information or Manu	facturer's Instructions on Pollution Control Equipment.
<b>APPLI</b> when re grant pe	[CAN] equired,	☐ Yes ☐ No, if not, why? <b>T:</b> I hereby certify that the information , is, to the best of my knowledge, compon for YRCAA staff to enter the premi	n contained in this application, including supplemental forms and data, plete and correct. I also agree to all fees for processing this permit and ises for inspection.
APPLI when re grant pe Signatur	CAN equired, ermissic	□ Yes □ No, if not, why? <b>T:</b> I hereby certify that the information , is, to the best of my knowledge, compon for YRCAA staff to enter the premi	n contained in this application, including supplemental forms and data, plete and correct. I also agree to all fees for processing this permit and ises for inspection.
APPLI when re grant pe Signatur Title	CAN equired, ermissic re	□ Yes □ No, if not, why? <b>T:</b> I hereby certify that the information , is, to the best of my knowledge, compon for YRCAA staff to enter the premi	n contained in this application, including supplemental forms and data, plete and correct. I also agree to all fees for processing this permit and ises for inspection. Date Date
APPLI when re grant pe Signatur Title Name an	CAN equired, ermissic re nd Title	□ Yes □ No, if not, why? <b>T:</b> I hereby certify that the information , is, to the best of my knowledge, compon on for YRCAA staff to enter the premi- e of Individual Filling out Form:	n contained in this application, including supplemental forms and data, plete and correct. I also agree to all fees for processing this permit and ises for inspection. DateDateDate
APPLI when re grant pe Signatur Title Name an	CAN equired, ermissic re nd Title Name	□ Yes □ No, if not, why? <b>T:</b> I hereby certify that the information , is, to the best of my knowledge, com on for YRCAA staff to enter the premi e of Individual Filling out Form: e (print) Alan T. Butler, P.E.	n contained in this application, including supplemental forms and data, plete and correct. I also agree to all fees for processing this permit and ises for inspection. Date
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APPLI when re grant pe Signatur Title Name an	CAN equired, ermissic re nd Title Name Signat and Titl Name	□ Yes □ No, if not, why? <b>T:</b> I hereby certify that the information , is, to the best of my knowledge, component on for YRCAA staff to enter the premised e of Individual Filling out Form: e (print)Alan T. Butler, P.E. tureAmBam le of Contact Person, if Different than <u>a</u> Mike Sheldon, DTG Chief Compliant	Above: Ce Officer, (425) 549-3000, mike@dtgrecycle.com
APPLI when re grant pe Signatur Title Name an Name a	CAN equired, ermissic re nd Title Name Signat and Titl Name Title_	□ Yes □ No, if not, why? <b>T:</b> I hereby certify that the information , is, to the best of my knowledge, component on for YRCAA staff to enter the premise e of Individual Filling out Form: e (print)Alan T. Butler, P.E. tureAu tureAu le of Contact Person, if Different than <u>a</u> Mike Sheldon, DTG Chief Compliant	Above: Ce Officer, (425) 549-3000, mike@dtgrecycle.com
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APPLI when re grant pe Signatur Title Name an Name a	ICAN equired, ermissic re nd Title Name Signat and Titl Name Title_ and Titl	□ Yes □ No, if not, why? <b>T:</b> I hereby certify that the information , is, to the best of my knowledge, component on for YRCAA staff to enter the premise e of Individual Filling out Form: e (print)Alan T. Butler, P.E. tureAmage tureAmage le of Contact Person, if Different than <u>a Mike Sheldon, DTG Chief Compliance</u> le of the Responsible Official for the prese	Above: Above: Ce Officer, (425) 549-3000, mike@dtgrecycle.com

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# Appendix B

Yakima Regional Clean Air Agency Yakima Health District Permits



June 24, 2020

Mike Sheldon DTG Enterprises, Inc. P.O. Box 14203 Mill Creek, WA 98082

RE: DTG Enterprises, Inc. Limited Purpose Landfill permit (HSW2019-00020).

Mr. Sheldon,

Enclosed with this letter is the permit for your Limited Purpose Landfill. The submitted operations plan dated June 22, 2020 is hereby approved. Please be aware of the requirements in condition 23.

If you have any questions, please call me at (509) 249-6562.

Sincerely,

Tal Short

Ted Silvestri, R.S. Environmental Health Specialist

cc Washington State Department of Ecology



#### SOLID WASTE PERMIT

#### TO OPERATE THE

### DTG ENTERPRISES, INC. LIMITED PURPOSE LANDFILL

#### Permit number HSW2019-00020

This permit is valid only based upon the accuracy of the below information and compliance with any attached conditions. The permit is not transferable. Any changes must have prior approval of, or be initiated by, the Yakima County Health District. Any fees paid are not refundable in whole or in part after the permit issue date.

To Operate:

Issued To (Permittee):

Permittee Mailing Address:

Date Issued:

Expiration Date:

Fee Amount:

Fee Paid:

Site Location:

Conditions:

Authorizing Signature

DTG Enterprises, Inc. Limited Purpose Landfill

DTG Enterprises, Inc.

P.O. Box 14203 Mill Creek, WA. 99082

June 24, 2020

Last day of June 2021

\$1,870.00

\$1,870.00

41 Rocky Top Rd. Yakima, WA 98908

Attached

Jad Shull

For Yakima Health District

Page 2 of 6

#### DTG ENTERPRISES, INC. LIMITED PURPOSE LANDFILL

#### Demonstrations

- A. WAC 173-350-400(2)(c) requires that the landfill's active area be 200 feet from a stream. It has been successfully demonstrated in the application dated December 2007 that a 50' setback to the drainage channel on this site is adequate. A 50 foot setback to the intermittent drainage way is hereby approved.
- B. It has been demonstrated in the application dated December 2007 that the proposed alternative cover and liner is as protective as the prescriptive cover and liner for this site. The proposed alternative cover and liner are hereby approved.
- C. It has been demonstrated in the *Geotechnical Evaluation Stability of Waste Embankments* dated March 5, 2008 that a 2:1 final slope grade is acceptable for this site. The 2:1 final slope is hereby approved.

#### Variance

The applicant has requested and has been granted a reduction in the setback between the fill to the property line from 100 feet to 50 feet.

#### Conditions

- 1. The permittee shall operate the facility in conformance with the Yakima County Comprehensive County-wide Solid Waste Management Plan and all written communications from the Yakima Health District.
- 2. The permittee shall keep records in compliance with WAC 173-350-400.
- 3. The permittee shall employ measures to prevent emission of fugitive dusts (i.e. watering of roads and covering).
- 4. Timbers, wood and other combustible waste shall be covered as needed during the summer months to avoid a fire hazard.
- 5. No burning of any waste will be allowed on the site.
- 6. The permittee shall close the facility in accordance with the approved closure plan contained in the application dated April 27, 2015, amended July 2015.

- 7. The permittee shall meet the requirements of WAC 173-350-400(8)(e), Recording with the County Auditor.
- 8. The permittee shall only accept approved wastes as described in the application dated v1.0 June 2020 (see attached). *No tires, household waste, grass clippings, asphalt less then 5 years old, old fuel or oil tanks shall be accepted.*
- 9. The permittee shall prevent unauthorized disposal during off-hours by controlling entry (i.e. lockable gate or barrier) when the facility is not being used.
- 10. The permittee shall operate the site in compliance with the approved operation plan contained in the application dated June 2020.
- 11. The permittee shall construct the final grade of the site to direct runoff away from the filled area as described in the closure plan contained in the application dated April 27, 2015, amended July 2015.
- 12. The permittee shall submit annual reports to the Yakima Health District and the Department of Ecology as detailed in WAC 173-350-400(4)(e). These reports must detail volumes and types of materials received since the last report and the volumes and types of materials shipped since the last report. This includes all materials removed from the waste for recycling or that have passed through this facility for recycling.
- 13. The permittee shall have a Certified Landfill Operator on-site or on-call at all times the landfill is open to the public.
- 14. If the working face gets larger than 8,000 square feet in size, the facility will notify the Yakima Health District and not accept any more waste until the working face is smaller than 8,000 square feet.
- 15. All plans and notifications shall be submitted to the Yakima Health District and the Department of Ecology for review and approval prior to construction.
- 16. The permittee shall handle all salvaging/recycling as described in the operations plan dated June 2020.
- 17. All salvaging/recycling must occur within the run-on/run-off controls for the landfill/PCS Remediation Site.
- 18. All open piles of salvaged/recyclable materials must comply with WAC 173-350-320.
- 19. The permittee shall not dispose of municipal solid waste in the DTG, Inc. Limited Purpose Landfill.

Page 4 of 6

- 20. The permittee is approved to salvage/recycle concrete, asphalt, metal, plastic and wood waste at this time.
- 21. Any other proposed waste stream for salvaging/recycling must be approved by the Yakima Health District prior to commencing recycling operations with that waste stream.
- 22. This facility is not a material recovery facility and should not accept source separated recyclables for recycling.
- 23. Financial assurance paperwork appears to be in order. Cost estimates must be reworked and submitted prior to the next permit renewal (in 1 year) and must be submitted with the permit renewal at that time. Provide closure cost estimates for all future cells/expansions/phases in addition to the current landfill cell.
- 24. No reduction in ground water monitoring frequency or landfill gas monitoring frequency is allowed without the written approval of the Yakima Health District.
- 25. Dredge spoil disposal must be approved by the Yakima Health District prior to acceptance at the landfill for disposal. Each of these approvals is one-time only and future dredge spoil approvals must be obtained before accepting other dredge spoils.

The waste types that will be accepted at the LPL include:

- Cured Concrete;
- Asphaltic Materials;
- Brick and Masonry;
- Ceramic Materials;
- Glass;
- Stainless Steel ;
- Aluminum;
- Lime;
- Dirt and Rock ;
- Construction, demolition, and land-clearing debris;
- Wood-waste;
- Ash (other than special incinerator ash); and
- Dredge spoils with prior approval.

Other waste might be acceptable for disposal in this landfill on a case-by-case basiss with prior approval of the Yakima Health District.

The waste types approved for recycling at the LPL include:

- Concrete;
- Asphalt
- Metal
- Wood



June 24, 2020

Mike Sheldon DTG Enterprises, Inc. P.O. Box 14203 Mill Creek, WA 98082

RE: Piles Used For Storage or Treatment Permit (Petroleum Contaminated Soils Treatment Facility Permit; permit number HSW2020-00001).

Mr. Sheldon:

The Yakima Health District has reviewed the *DTG Recycle – Yakima Petroleum Contaminated Soil Treatment Facility Operations Plan*, dated June 9, 2020. We have also consulted with the Washington State Department of Ecology regarding this operations plan. This operations plan is approved.

Enclosed with this letter is the permit for your Piles Used For Storage or Treatment (Petroleum Contaminated Soil (PCS) Treatment site). If you have any questions, please call me at (509) 249-6562.

Sincerely,

Fed Shouth

Ted Silvestri, R.S. Environmental Health Specialist

cc: Department of Ecology



#### SOLID WASTE PERMIT

#### TO OPERATE THE

#### DTG RECYCLE – YAKIMA PETROLEUM CONTAMINATED SOIL TREATMENT SITE

#### PERMIT NUMBER HSW2020-00001

This permit is valid only based upon the accuracy of the below information and compliance with any attached conditions. The permit is not transferable. Any changes must have prior approval of, or be initiated by, the Yakima County Health District. Any fees paid are not refundable in whole or in part after the permit issue date.

**DTG Enterprises** 

P.O. Box 14203

June 24, 2020

\$1,870.00

\$1,870.00

End of June 2021

41 Rocky Top Rd.

Mill Creek, WA 908082

To Operate:

DTG Recycle Petroleum Contaminated Soil Treatment Site

Issued To (Permittee):

Permittee Mailing Address:

Date Issued:

**Expiration Date:** 

Fee Amount:

Fee Paid:

Site Location:

Conditions:

Attached

Shint Signature: 4 Health Officer or Designee

Page 2 of 3

#### DTG RECYCLE - YAKIMA PCS TREATMENT SITE PERMIT CONDITIONS Permit Number HSW2020-00001

- 1. All material received on-site will be handled in accordance with the operations plan.
- 2. No material will be accepted without a letter from the Yakima Health District approving treatment at this site.
- 3. When accepting soils for petroleum remediation, no contaminants, other than petroleum, can exceed the MTCA level A limits for soils.
- 4. No material will be removed from the site without first submitting a request to the Yakima Health District and receiving written permission to remove the material. The request to remove the material must include:
  - A. The name of the producer of the material.
  - B. The test data on the material, including all test results of the material from start to finish.
  - C. The proposed location and end use of the material.
- 5. The permittee will comply with the Final Closure Plan.
- 6. The permittee shall obtain all other federal, state, and local permits or licenses which are required for this operation.
- 7. If changes or exceptions to the normal operating hours are proposed, notify the Yakima Health District in advance.
- 8. All activities at this facility must be in compliance with WAC 173-350.

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July 8, 2021

Mike Sheldon DTG Enterprises, Inc. P.O. Box 14203 Mill Creek, WA 98082

RE: DTG Enterprises, Inc. Material Recovery Facility permit (HSW2020-00003).

Mr. Sheldon,

Enclosed with this letter is the permit for your Material Recovery Facility. Please remember that the facility should at all times operate in compliance with local, state and federal rules and avoid participating in sham recycling activities. If violations of rules or sham recycling activities are discovered, the Yakima Health District will abate those violations as appropriate.

If you have any questions, please call me at (509) 249-6562.

Sincerely,

Tel Starto

Ted Silvestri, R.S. Environmental Health Specialist

cc Washington State Department of Ecology



#### SOLID WASTE PERMIT

#### TO OPERATE THE

#### DTG ENTERPRISES, INC. MATERIAL RECOVERY FACILITY

#### Permit number HSW2020-00003

This permit is valid only based upon the accuracy of the below information and compliance with any attached conditions. The permit is not transferable. Any changes must have prior approval of, or be initiated by, the Yakima County Health District. Any fees paid are not refundable in whole or in part after the permit issue date.

To Operate:

Issued To (Permittee):

Permittee Mailing Address:

Date Issued:

**Expiration Date:** 

Fee Amount:

Fee Paid:

Site Location:

Conditions:

Authorizing Signature

DTG Enterprises, Inc. Material Recovery Facility

DTG Enterprises, Inc.

P.O. Box 14203 Mill Creek, WA. 99082

July 8, 2021

Last day of July 2022

\$523.00

\$523.00

41 Rocky Top Rd. Yakima, WA 98908

Attached

Tel Should

For Yakima Health District

#### DTG ENTERPRISES, INC. MATERIAL RECOVERY FACILITY

WAC 173-350-210(4)(e) requires an impervious tipping floor. The applicant has successfully demonstrated that the lack of an impervious surface on the tipping floor is as protective of human health and the environment in this case. The approval of this variance applies as long as the tipping floor is within the landfill footprint.

Since the applicant proposes to not have an impervious tipping floor and to utilize the existing permitted active landfill area, WAC 173-350-210(4)(g) does not apply. This variance is only in effect as long the tipping floor is within the landfill footprint and the Limited Purpose Landfill continues to be permitted.

WAC 173-350-210(4)(f) requires a cover over the tipping floor. The applicant has successfully demonstrated that the lack of a cover is protective of human health the the environment as long as the tipping floor is within the landfill footprint.

#### Conditions

- 1. The permittee shall operate the facility in conformance with the Yakima County Comprehensive County-Wide Solid Waste Management Plan and all written communications from the Yakima Health District.
- 2. The permittee shall keep records in compliance with WAC 173-350-210.
- 3. The permittee shall employ measures to prevent emission of fugitive dusts (i.e. watering of roads and working area).
- 4. No burning of any waste will be allowed on the site.
- 5. The permittee shall close the facility in accordance with the approved closure plan contained in the application dated May 2021.
- 6. The permittee shall prevent unauthorized dumping during off-hours by controlling entry (i.e. lockable gate or barrier) when the facility is not being used.
- 7. The permittee shall operate the site in compliance with the approved operation plan contained in the application dated May 2021 (v1.2).

- 8. The permittee shall submit annual reports to the Yakima Health District and the Department of Ecology as detailed in WAC 173-350-210(6)(b). These reports must detail volumes and types of materials received since the last report, the volumes and types of materials shipped (recycled) since the last report, and volumes and types of materials disposed since the last report.
- 9. All salvaging and recycling must occur within the run-on/run-off controls for the landfill.
- 10. All open piles of salvaged/recyclable materials must comply with WAC 173-350-320 Piles Used For Storage Or Treatment.
- 11. The permittee shall not accept materials containing municipal solid waste.
- 12. Any other proposed waste stream for salvaging/recycling must be approved by the Yakima Health District, with concurrence from Ecology, prior to commencing recycling operations with that waste stream.
- 13. Only Material Recovery Facility residuals from this Material Recovery Facility may be disposed of in the DTG Limited Purpose Landfill (if the material is appropriate for disposal in this landfill). No residuals from other Material Recovery Facilities may be disposed of in this landfill.
- 14. All UTC standards for the transportation of solid waste, including recyclable materials, must be complied with.
- 15. Any materials that could be negatively impacted by precipitation or exposure are to be kept in covered containers.
- 16. All recyclables stored at this site must be protected as commodities. (They must be protected from degradation.)
- 17. The permittee must comply with all applicable regulations.
The waste types that will be accepted at the Material Recovery Facility include:

- Cured concrete
- Asphaltic materials
- Metal
- Construction, demolition and land clearing debris
- Wood

Other waste streams may be acceptable for recycling at this facility with prior approval of the Yakima Health District with concurrence from the Washington State Department of Ecology.

# Appendix C

SEPA Determinations of Non-Significance

#### DETERMINATION OF NONSIGNIFICANCE

- 1. Description of Proposal: Remediate petroleum contaminated soil at a fifteen-acre site adjacent to an existing remediation facility.
- 2. Proponent: Ron Anderson 41 Rocky Top Road Yakima, WA 98908
- 3. Location of Proposal: West of Rocky Top Road (a private road) about one mile west of Summitview Road and nine miles northwest of Yakima. (Parcel No. 171310-24001)
- 4. Lead Agency: Yakima County Planning Department
- 5. File No: ER-43-1992
- The lead agency for this proposal has determined that it 6. does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). The decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This DNS is issued under 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below. Comments must be submitted by September 25, 1992.

- 7. Responsible Official: STEVE ERICKSON
- Assistant Director of Planning 8. Position/Title:
- 9. Address:

11. Signature:

Room 417, Courthouse Yakima, WA 98901

10. Date:

September 10, 1992

Sep 07 16 09:08a

#### **DETERMINATION OF NON-SIGNIFICANCE**

- 1. Description of Proposal: The Yakima County Planning Division has received a request to expand the existing limited purpose landfill (LPL) by 64 acres for a total area of approximately 125 acres. The types of waste accepted at the LPL are: cured concrete, asphaltic materials, brick and masonry, ceramic materials, glass, stainless steel, aluminum, lime, dirt and rock, CDL (construction, demolition, and land clearing) debris, wood waste, ash, and dredge spoils. All other types of waste, including liquid waste, is prohibited from intermment at the LPL.
- 2. File Number: SEP2015-00024

3.	Owner:	Ron Anderson 41 Rocky Top Road Yakima, WA 98908	Proponent:	Brown and Caldwell Attn: Ian Sutton 701 Pike Street, Suite 1200 Seattle, WA 98101
----	--------	---	------------	--

- Location of Proposal: 41 Rocky Top Road, Yakima, WA. The property is located south of Rocky Top Road, about 3/4 miles east of the intersection of Rocky Top Road and Summitview Road and approximately 3 miles northwest of the City of Yakima. (Parcel No. 171310-31003)
- 5. Lead Agency: Yakima County Planning Division
- 6. Determination: The lead agency has determined that the requirements for environmental analysis, protection, and mitigation measures have been adequately addressed in the development regulations and comprehensive plan adopted under chapter <u>36.70A</u> RCW, and in other applicable local, state, or federal laws or rules, as provided by RCW <u>43.21C.240</u> and WAC 197-11-158. Our agency will not require any additional mitigation measures under SEPA. This decision was made after a careful review of the completed environmental checklist, a review of other laws, rules, and regulations, and other information on file with the lead agency. This information (including all environmental documentation) is available to the public on request and can be examined in our offices during regular business hours or online at www.yakimap.com/permits. Environmental documents include the SEPA checklist, this threshold determination, and submittal materials.
- 7. Comment and Appeal Information: This DNS is issued under WAC 197-11-340(2). The Lead Agency will not act on this proposal for 14 days from the date of issuance. You may submit comments on this proposal to the address below before 4:00 p.m. on <u>9/23</u>, <u>2015.</u> Agencies and those providing comments will receive a copy of the final decision. Appeal information will be provided with the final decision. For information on the comment or appeal processes, or on other issues relating to this proposal. contact Byron Gumz, Senior Project Planner, at (509) 574-2300.

p.2

9. Designee: Address:

10.

Thomas Carroll 128 N. 2<sup>nd</sup> St. 4<sup>th</sup>, Floor Courthouse Yakima, WA 98901 9/9, 2015 U

11. Date: p.3



# **Public Services**

**128 North Second Street • Fourth Floor Courthouse • Yakima, Washington 98901** (509) 574-2300 • 1-800-572-7354 • FAX (509) 574-2301 • www.co.yakima.wa.us

LISA H. FREUND – Director

October 22, 2020

John Martin Associate General Counsel DTG Enterprises, Inc. PO Box 14203 Mill Creek, WA 98082

Re: Anderson - Recycling

John,

Thank you for bringing to our attention the misphrased portion of our code relating to solid waste recycling. The specific portion of code 19.18.440(2)(b)(ii) states:

19.18.440 Solid Waste Handling and Disposal Sites

(2) Applicability.

(b) Exemptions. The following solid waste activities shall be exempt from any permit requirements of this Section:

(ii) Solid waste recycling and reclamation activities not conducted on the same site as an accessory to a solid waste disposal operation provided, that such recycling and reclamation activities shall be subject to the use regulation of this Section.

The intent of this section is to exempt solid waste recycling or reclamation activities from having to obtain additional land use approval if located within an approved solid waste disposal operation. Additional permit requirements (i.e. building permits, Health District, Ecology, etc.) may still be required, as well as compliance with any conditions set forth in the underlying landfill permit (i.e. hours of operation, dust abatement, setbacks, etc.) that may impact the proposed recycling or reclamation activites. If you have any questions please feel free to call me at 509-574-2498.

Thank you,

Tommy Carroll Yakima County Planning Official

Yakima County ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin, or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding Yakima County's Title VI Program, you may contact the Title VI Coordinator at 509-574-2300.

If this letter pertains to a meeting and you need special accommodations, please call us at 509-574-2300 by 10:00 a.m. three days prior to the meeting. For TDD users, please use the State's toll free relay service 1-800-833-6388 and ask the operator to dial 509-574-2300.

## Appendix D

DTG Recycle – Yakima LPL and MRF, Operations Plan

# DTG Recycle – Yakima

# Limited Purpose Landfill Operations Plan



v1.0 – June 2020

Facility Address: 41 Rocky Top Road Yakima, WA. 98908

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## List of Abbreviations

Anderson	Anderson Rock & Demolition Pits		
CPR	cardiopulmonary resuscitation		
DTG	DTG Enterprises, Inc.		
Ecology	Washington State Department of Ecology		
EMI or Landlord	East Mountain Investments LLC		
EPA	United States Environmental Protection Agency		
Groundwater Plan	Groundwater Sampling and Analysis Plan		
Facility	41 Rocky Top Road, Yakima, WA 98908		
LFG	landfill gas		
LPL	limited purpose landfill		
MSDS	Material Safety Data Sheet		
MTCA	Model Toxics Control Act		
PCS	petroleum contaminated soil		
SACM	Suspect Asbestos Containing Materials		
WAC	Washington Administrative Code		
WSDOT	Washington State Department of Transportation		
yd <sup>3</sup>	cubic yard		
YHD	Yakima Health District		
YPD	Yakima County Planning Division		

## **OPERATIONS PLAN**

### WAC 173-350-400(6)

Applicant:

DTG Enterprises, Inc.

Facility Type: Limited Purpose Landfill

**Facility Location:** 

41 Rocky Top Road Yakima, WA 98908

**Applicant Contact:** 

Mike Sheldon DTG Enterprises, Inc. PO Box 14203 Mill Creek, WA 98082

(425) 549-3000 mike@dtgrecycle.com

#### I. Introduction

In November 2019, DTG Enterprises, Inc. ("DTG") purchased Anderson Rock & Demolition Pits ("Anderson") at 41 Rocky Top Road, Yakima, WA 98908 (the "Facility"). Existing, permitted operations at the Facility include a surface mine, a petroleum contaminated soil ("PCS") treatment facility, and a limited purpose landfill ("LPL"). DTG will continue these operations at the Facility.

DTG developed this Operations Plan to provide information on operation and maintenance procedures for the Facility's LPL operations. The Operations Plan presents technical guidance and regulatory requirements to ensure effective operations under both normal and emergency conditions.

This Operations Plan is intended to present the standard methods and procedures of the LPL operation in adequate detail to demonstrate compliance with the regulatory requirements of Washington Administrative Code ("WAC") 173-350-040 and WAC 173-350-400. The Operations Plan also provides supporting documentation for facility permitting.

#### II. Location and Description

The Facility is in a rural area northwest of the City of Yakima. Appendix A shows the Site Plan, prepared in 2015 for Anderson. DTG subsidiary East Mountain Investments LLC ("EMI" or "Landlord") owns the land. DTG leases the land from EMI, owns the equipment, and operates the Facility. The Facility has a permitted LPL waste disposal footprint of approximately 125 acres. This remote location provides security and reduces impacts on the surrounding community.

There are private residences and orchards to the north and northeast of the facility. The area to the southwest, west, south, and southeast is vacant arid land.

#### III. General Operations

This section describes general operations of the LPL, including operating hours and access control.

#### A. Operating Hours

The Facility is permitted to operate Monday through Saturday from 6:00 a.m. to 6:00 p.m. Normal operating hours for waste disposal are Monday through Friday from 7:00 a.m. to 5:00 p.m., except for the following holidays:

- New Year's Day (January 1)
- Memorial Day (last Monday in May)
- Independence Day (July 4)
- Labor Day (first Monday in September)
- Thanksgiving Day (fourth Thursday in November)
- Christmas Day (December 25)

Operating hours may be temporarily extended beyond the 6:00 a.m. to 6:00 p.m. time frame. Any such extension of operating hours will require demonstration of the special need and coordination and approval from the Yakima County Planning Division ("YPD") with notification to the Yakima Health District ("YHD").

#### B. Access Control

Regulatory requirements dictate that public access must be controlled, and unauthorized traffic must be prevented on the landfill site. To accomplish this, gates preventing vehicular access are locked during hours when the Facility is not in operation. There is one access road to the site, and it is in plain view of the office so the attendant can monitor the traffic traveling toward the Facility. A chip seal road provides access from the office to the LPL. The chip seal road will be maintained as needed to facilitate LPL operations and access and to ensure LPL safety and functionality.

No customers will be allowed to enter the LPL to unload waste unless the landfill is open and the required LPL staff are on-site.

#### IV. Types of Solid Waste Handled – WAC 173-350-400(6)(a)(i)

This section describes the types of solid waste to be handled at the LPL. Only the following waste types will be accepted at the LPL:

- Cured concrete
- Asphaltic materials
- Brick and masonry
- Ceramic materials
- Glass
- Stainless steel
- Aluminum
- Lime
- Gypsum, scrap drywall
- Dirt and rock
- Construction, demolition, and land-clearing debris
- Wood waste
- Ash (other than special incinerator ash)
- Dredge spoils

All other waste types, including but not limited to tires, mattresses, and furniture are prohibited and will be handled as described in Sections V(A) and V(B). This includes, but is not limited to, contaminated soils and contaminated dredge material. Untreated PCS is prohibited from the LPL; however, treated PCS is acceptable provided that the treated PCS meets the Model Toxics Control Act ("MTCA") Method A standards for petroleum and other contaminants.

Note that spent lime is disposed of at the LPL in the same manner as other wastes. Spent lime arrives in a hydrated state without risk of generating heat and carbon dioxide from additional contact with water. The possible effects of large amounts of lime would be an increased leachate pH and calcium concentration. Leachate is typically acidic, and the presence of lime would act as a buffer against the low pH. One result of a less acidic leachate is that it will cause dissolved metals and other contaminants to precipitate out of the leachate, thus reducing transport. A higher calcium concentration is not a concern as it is not regulated by the performance standards. The presence of spent lime is not expected to effect methane generation from the waste.

Additional materials may be accepted with prior written approval from the YHD.

#### V. Waste Acceptance – WAC 173-350-400(6)(a)(ii)

This section describes the criteria and procedures used to ensure that dangerous waste and other unacceptable waste, including liquid waste, are not accepted at the LPL.

#### A. Waste Inspection and Acceptance

Incoming waste must be inspected to prevent unacceptable waste from entering the LPL. All waste delivered for disposal at the LPL will be inspected, weighed, and recorded in the Digital Volume Log which includes the electronic invoices for each customer. The log is maintained in the computer located in the scale office.

The waste inspection program includes the set of waste acceptance criteria listed below. DTG will not accept any waste destined for the LPL that does not comply with the control criteria. These criteria include at least the following major components:

- Inquiry by the scale attendant
- Visual check of loads by scale attendant
- Random waste inspections at unloading point
- Reference to list of acceptable materials and recording previously rejected materials by source.

All generating sources of questionable solid wastes are advised of waste acceptance criteria and asked to pre-qualify their waste and employ management procedures that conform to operating requirements and permit conditions. Information is supplied to customers describing acceptable and restricted wastes. Training in waste characterization and designation will be provided on request.

Facility employees will be trained to recognize non-permitted waste to avoid its improper disposal in the LPL. Each employee will be provided with waste screening information and then tested on acceptable materials. All operations personnel are informed of the implications to DTG and themselves of accepting nonconforming wastes.

Routine inquiry and visual inspection will be performed by the scale attendant prior to loads being directed to the LPL. The operator at the LPL will randomly inspect loads, as loads are delivered to the landfill. Each load will be visually inspected, both in the truck before tipping and after the waste is on the tipping area of the working face. Because of the frequency with which loads come to the landfill, there is enough time to inspect at the working face without interfering with other operational activities.

After inspection, any prohibited waste observed will be returned to the customer for proper disposal elsewhere. If prohibited waste is found after the customer has left the site, the customer will be called and required to return to the site to pick up the prohibited waste. Personnel operating the Facility reserve the right to reject loads.

Inspections resulting in the identification of prohibited waste are to be recorded, including vehicle (or license) number, the refused waste, and the method by which the situation was resolved, and all records are to be placed in the Daily Operations Log.

If non-permitted waste is found to have been disposed of in the LPL, YHD will be notified immediately.

#### B. Liquid Waste

Disposal of liquid waste or liquids at the LPL is prohibited. Liquid waste is defined by WAC 173-350-100 as any solid waste which is deemed to contain free liquids, as determined by the Paint Filter Liquids Test, Method 9095B, in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, United States Environmental Protection Agency ("EPA") Publication SW-846. Any loads found to contain liquid waste or liquids will be directed to another disposal facility. If the customer has other wastes that can be disposed of at the LPL, those wastes can be disposed of properly on site, but the refused material will not be placed in the landfill.

#### C. Dredge Spoils

Dredge spoils disposal must meet the contaminant guidelines required for the LPL (i.e. either clean material or treated PCS meeting MTCA Method A standards for petroleum and other contaminants). Dredge spoils will not be dewatered onsite and must meet Washington State Department of Transportation ("WSDOT") transportation requirements for hauling to the site, meaning they must have passed the Paint Filter Liquids Test, EPA Method 9095B.

Documentation of contamination level and liquid content test results will be provided to YHD for review and approval. Individual loads of dredge spoils must include a letter of approval from YHD stating that the material is approved for disposal at the LPL ("Approval Letter"). The LPL will not accept any loads of dredge spoils without an Approval Letter from YHD.

#### VI. Waste Handling – WAC 173-350-400(6)(a)(iii)

This section describes how solid wastes are to be handled on-site, including identification of unloading and staging area, transportation practices, and housekeeping activities.

#### A. Transportation

Waste is accepted from commercial and public customers. The main entrance to the Facility is from the scale office following Rocky Top Road east through a gate and then to the active fill area of the LPL. The LPL exit follows the reverse route back to the scale office. Customers will be directed from the scale office to self-haul their materials to the active area of the LPL and then return to the scale office after dumping their waste as close to the fill area as possible.

#### B. Unloading and Staging

Customers will be met by the LPL operator at the active fill area and directed to the appropriate unload area adjacent to the fill area. If multiple customers are onsite at the same time, customers will be required to wait in a queue until directed to unload by the LPL operator. Dumping will be performed in turn, or customers will be directed to maintain safe separation for unloading. Customer will return to the scale office after unloading.

Customers will self-unload. The LPL operator will not physically assist customers with material unloading. Exceptions require prior approval from the Site Manager. The LPL operator shall not enter a customer vehicle at any time.

#### C. Housekeeping

Housekeeping activities in the active LPL fill area will primarily consist of litter and dust control in accordance with Section VII(B) and minor grading and waste placement activities to manage the work area.

#### D. Open Burning

Burning of any waste is prohibited at the LPL. If an aboveground waste fire occurs, it will be extinguished as quickly as possible, and must be extinguished within 24 hours. Every effort will be made to prevent fires from starting or spreading.

If a vehicle's load is smoking, the driver will be directed to a clear area within the limits of the LPL area, but away from other waste or materials that may be flammable. The vehicle's driver will be directed to unload the smoking waste and then the LPL operator will extinguish it with dirt. The extinguished waste will then be disposed of with the other waste after it has cooled.

If a vehicle's load is burning, the driver will be directed to immediately unload the waste in the open area adjacent to the office. The waste will be extinguished with dirt and then disposed of with the other waste in the landfill.

#### E. Equipment

Table 1 lists the on-site equipment currently used for landfill operations and owned by DTG.

Table 1. Equipment List						
Equipment	Make/model (if known)	Quantity				
Dozer	Cat D10N	1				
Excavator	Kobelco 160	1				
Haul truck	Terex	1				
Wheel loader	Komatsu 450	1				
Water truck	Peterbilt	1				

Regulations require that reserve operational equipment is available to maintain operations at the facility. Because most of the operations at the LPL can be postponed for up to 1 or 2 days without impacting operations or adversely affecting human health or the environment, in the event of an equipment breakdown, reserve equipment is not necessary to maintain operations. If any equipment on site requires maintenance, DTG management or their designees will be notified so maintenance activities can begin immediately. All postponed operations will begin as soon as the equipment is repaired. All equipment will undergo preventive maintenance as recommended by the equipment manufacturer.

#### F. Salvage/Recycling Plan

Material received at the LPL suitable for salvage/recycling will be separated and salvaged/recycled to the extent possible according to the Salvage/Recycling Plan attached in Appendix D. No salvageable/recyclable materials that cannot be disposed of at the landfill will be accepted at the facility. The salvage/recycling area will be determined as needed and will be moved as conditions change, but it will be within the approved LPL area.

Material will be sorted by machinery and/or hand into appropriate commodity bins or piles. Approved commodities that require further sorting will be loaded for transport to a facility approved for recycling or material recovery under WAC 173-350-210.

Wood will be ground up into hog fuel and hauled for use at a cogeneration plant. Mixed metal will be stockpiled and shipped for reuse. Concrete will be stockpiled and crushed for resale. Asphaltic materials will be stockpiled and shipped for resale. DTG will keep a log of inbound and outbound salvageable/recyclable commodities, and remaining residuals will be disposed in the LPL.

Material storage piles will be regulated under the LPL permit in accordance with WAC 173-350-400 and managed in alignment with the requirements of WAC 173-350-320, Piles Used for Storage or Treatment. Piles will be no greater than 250 cubic yards ("yd<sup>3</sup>") per material type.

Each calendar year, DTG will remove at least 50% of the sum of the volume of each commodity pile present at the start of the calendar year and of the volume of material pulled for salvage/recycling during the calendar year, i.e. if the calendar year starts with 250 yd<sup>3</sup> of a commodity and DTG pulls an additional 250 yd<sup>3</sup> of that commodity during the calendar year, at least 250 yd<sup>3</sup> [0.5 x (250 + 250) = 250] of material will be removed by the end of the calendar year.

If a need is encountered which will require greater onsite pile sizes, DTG will request approval from the YHD. The request will include the reason for the need and the estimated temporary pile size and duration associated with the increase.

Piles will reside within the permitted LPL footprint. Piles will not exceed 20 feet in height and will maintain a minimum 20-foot roadway between and around pile types. Piles management will be subject to review as requested by the YHD and Yakima County Fire Marshal.

Export of material piles will be reported annually as part of the Annual Report discussed in Section XV.

#### VII. Environmental Controls – WAC 173-350-400(6)(a)(iv)

This section describes environmental controls to be employed at the Facility LPL, including protection of containment and monitoring structures, litter, dust, vectors, and prevent scavenging.

#### A. Protection of Containment and Monitoring Structures

Containment structures primarily consist of stormwater controls and landfill cover. Final stormwater features and cover areas will be installed as filling achieves final grades. Filling operations will maintain a reasonable distance from these containment structures. Temporary stormwater and cover measures will be implemented in fill areas as discussed in the Surface Water Management section of the Engineering Report and Section IX of this plan, respectively.

Monitoring structures will include groundwater monitoring wells. Proper protective devices such as bollards will be used to protect monitoring structures from landfill operation activities. Monitoring structures are also be located away from the permitted waste boundary.

#### B. Litter, Dust, and Odor Control

Uncontrolled litter can harbor vectors, create a potential fire hazard, become an aesthetic nuisance, and adversely affect wildlife and its habitat.

Litter control inspections of the site will be performed once per week and after high wind events to determine if litter cleanup is necessary. Cleanup will be scheduled based on the results of the inspections. Results of all inspections and litter cleanup efforts will be noted in the Daily Operations Log.

Fugitive dust will be controlled at the site by watering roadways and cover soil. Note that watering will be limited to surface material only. This minimal amount of water will not infiltrate significantly. Rather, the water will be stored in the pore space of the surface soil and evaporated. Excessive watering could contribute to leachate production.

Odors are generally controlled through the material types accepted for disposal at the LPL. Materials are generally inert and typically do not generate significant odor. Odors are also controlled through the regular and timely placement of waste into the landfill without prolonged exposure to the surrounding environment and the use of cover soil. Additional cover soil will be used to control odors as necessary.

#### C. Vector Control

The types of waste that are accepted at the LPL are not likely to become putrescible and thus will not attract vectors as a food source. However, certain passive methods are used to ensure that vectors do not nest in the waste. These methods include daily inspections of the working face, compaction of the waste, and cover soil placement. If necessary, cover soil will be placed at more frequent intervals if vectors become a nuisance.

#### D. On-Site Attendant

At least two LPL operations staff will be on-site during LPL hours of operation as discussed in Section VIII.

#### E. Scavenging

Scavenging is strictly prohibited at the site. Disposed of waste will not be allowed offsite. If it is determined that items were scavenged, a record of the incident will be entered into the Daily Operations Log. If scavenging becomes a consistent problem, measures will be implemented to prevent reoccurrence.

The facility is secured by a gate across the access roadway to prevent vehicle access during non-business hours of operation. The gated roadway is the only vehicle access route to the landfill.

#### VIII. Personnel – WAC 173-350-400(6)(a)(v)

WAC 173-350-400(6)(a)(v) requires that at least two landfill personnel are on site, with one person at the active face when the site is open to the public, for disposal facilities with a permitted capacity of greater than 50,000 yd<sup>3</sup> per year.

Currently, the LPL accepts approximately 111,000 yd<sup>3</sup> per year and is staffed by four employees. At least one DTG employee manages the active face and all field responsibilities, and one DTG employee manages the scale office. The other employees support LPL fill operations. DTG will have a Certified Landfill Operator on site at all times the landfill is open to the public. Other DTG personnel are available from other Facility operations as needed. Operator certification will be per the WAC 173-300 requirements.

No customers will be allowed to enter the LPL to unload waste unless the landfill is open and the required LPL staff are on-site.

#### IX. Waste Disposal – WAC 173-350-400(6)(a)(vi)

This section includes a description of how waste will be landfilled. After inspecting the load for non-permitted waste (refer to Sections V(A) and V(B)), the unloaded waste will be pushed into the fill area with the bulldozer. The waste will be spread into layers up to 24 inches thick and compacted to achieve lifts up to 15 feet in thickness with perimeter slopes of 2:1 or flatter. Waste will be compacted using the bulldozer by traversing the entire length of the working face. In areas that will not receive waste for an extended period, or when the waste material type warrants adding cover on a more frequent basis, the waste will be covered with a minimum of 6 inches of soil. Waste will not remain exposed more than three months without receiving additional waste or cover soil.

Cover soil is available on site from borrow, quarry, and treated PCS areas. Cover soils will be limited to material with minimal organics and rock sizes less than 6 inches in the largest dimension. The LPL operator is responsible for cover soil placement.

#### X. Explosive Gas Monitoring, Control, and Response – WAC 173-350-400(6)(a)(vii)

This section includes a description of how any explosive gases generated at the LPL will be monitored and controlled and how DTG will respond to the detection of explosive gases in a manner that ensures protection of human health.

LFG control will be through passive ventilation though the landfill soil cover. Based on the characteristics of the waste anticipated in the LPL, LFG generation rates are expected to be low. Refer to the Geotechnical and Hydrogeologic Investigation Report (HWA, 2007) for soil and hydrogeologic conditions surrounding the site. The low generation rate is unlikely to develop enough pressure to allow LFG to migrate laterally through local soils. It is more probable that any LFG will vent through the soil cover. As such, soil gas monitoring at the property boundary is not required. LFG concentration in on-site structures is not a concern as there are no on-site structures at the LPL. The office and scale for the facility are located approximately 4,000 feet away, on a separate parcel east of the site. The property boundary and facility structures are shown on the Site Plan.

If LFG production exceeds that expected, soil gas monitoring probes will be installed at the property boundary. LFG production will also be used to determine the need for monitoring of off-site structures. Currently, the nearest off-site structure is approximately 250 feet from the property boundary.

Ambient LFG monitoring will be performed on a quarterly basis, at the locations shown on the Site Plan, to ensure that ambient LFG concentrations do not exceed the lower explosive limit ("LEL") at the property boundary. Monitoring will continue until it has been demonstrated that monitoring is no longer required for the LPL.

DTG will notify YHD, Ecology, and the local fire authority in writing within 8 hours of the monitoring event if there is an exceedance in methane concentration as discussed below.

#### A. Landfill Surface Methane Emissions Monitoring Plan

Surface methane emissions will be monitored at locations shown on the Site Plan. Locations will be adjusted in the future as required to effectively monitor the waste mass as filling progresses.

The perimeter locations will be monitored quarterly for possible methane emissions from the landfill. Monitoring frequency may be reduced through application to the YHD and Ecology with a demonstration of consistent, acceptable emission levels at the site. The surface methane emissions monitoring will be conducted using a random instantaneous surface sweep over the ground surface during typical meteorological conditions, i.e. the wind speed between 0 to 10 mph.

Monitoring will be conducted within the perimeter of the landfill property boundary and recorded in an LFG Monitoring Log. The combustible methane gas instrument (i.e. Landtec GEM-5000) will be calibrated at 1,250 ppm (2.5% LEL) methane calibration gases. The monitoring procedures for the surface methane emissions is as follows:

NOTE:Operator of the field instruments should thoroughly read the owner's manual prior to monitoring since the instruments require certain functions to be completed before proceeding. The following monitoring procedures in this section presume that the operator is familiar and has full understanding on the operation of the instrument(s), and instruments are ready for operation.

- 1. The technician will have a map of the site marked with the monitoring locations.
- 2. Record the following data prior to monitoring:
  - a. Date and time
  - b. Ambient temperature
  - c. Weather conditions
  - d. Barometric pressure
  - e. Name of person (calibration and monitoring)
- 3. Position the instrument inlet tubing between 2 and 4 inches above ground surface.
- 4. Turn the instrument "On" and allow the instrument to warm up.
- 5. Monitor 100 feet upwind of the landfill to determine a background methane concentration.
- 6. In accordance with the pre-determined monitoring locations, the instrument readings will be observed. If applicable to the location, the technician will pay particular attention to areas with thin or poor landfill cover, or cracks and settlement in the landfill cover.
- 7. Readings of 1,250 ppm or greater and the location will be marked and recorded on the map.
- 8. If no readings were of 1,250 ppm or greater, the surface methane emissions monitoring is finished and skip the following step. However, if any of the readings were 1,250 ppm or greater then go to Step 9.

9. All locations, 1,250 ppm or greater, will be rechecked 10 calendar days from the exceedance reading. Note: Within these 10 days, it may be appropriate to perform landfill cover maintenance prior to the recheck. Follow Steps 1 through 5 prior to rechecking the exceedance location(s).

#### B. Notifications and Response

If methane is identified at, or above, the LEL (5% concentration or 50,000 ppm) at any testing locations in ambient air at the property boundary or beyond, DTG will take all necessary steps to ensure protection of human health including:

- 1. Notifying the YHD and Ecology;
- 2. Notifying the local fire authority;
- 3. Monitoring off-site structures adjacent to the landfill;
- 4. Monitoring explosive gas levels daily, unless otherwise authorized by the YHD.

Notifications will be made within 8 hours of the detection. Contact numbers will be in accordance with Appendix B of this Operations Plan.

Off-site structures affected by LFG will be evacuated until determined to be safe for occupancy.

Within seven calendar days of the explosive gas levels detection, at or above the LEL, DTG will record the incident in the operating record identifying the explosive gas levels detected and a description of the steps taken to protect human health. DTG will also provide written notification to the YHD.

Within sixty days of the explosive gas levels exceedance detection, DTG will implement a remediation plan for the explosive gas releases, describing the nature and extent of the problem and the remedy. This plan will be sent to the YHD for approval as an amendment to this Operations Plan. A copy of the remediation plan shall be placed in the operating record.

#### XI. Inspection and Maintenance – WAC 173-350-400(6)(a)(viii)

This section includes a description of how equipment, structures, and other systems, including collection and control systems, are to be inspected and maintained, including the frequency of inspection and inspection logs.

General site inspections will be conducted each day before opening the landfill to customers. These inspections include, but are not limited to:

- Onsite access roads to determine if maintenance is necessary to ensure safe travel by customers and operations vehicles
- Working face for evidence of vector nesting or scavenging during closed hours
- Containment structures to determine if maintenance is needed
- Evidence of erosion
- Evidence of vandalism
- Evidence of trespassers
- Evidence of smoke or fire

At a minimum, weekly inspections will be performed for litter control in accordance with Section VII(B). Litter inspections will also be performed after high wind events.

At a minimum, weekly inspections of the LPL cover and surface water management systems will be performed. Inspections will also be performed immediately after a significant storm event. Surface water features will be inspected for condition and available capacity.

Staff will record results of the inspection in the Daily Operations Log. In addition, staff will notify a DTG supervisor or designee of necessary maintenance or repairs so they can be scheduled. All maintenance and repairs will be accomplished no later than 30 days after the inspection, as weather conditions permit. Once the maintenance and repairs are complete, these activities will be outlined and described in the Daily Operations Log.

#### XII. Record Keeping – WAC 173-350-400(6)(a)(ix)

This section includes a description of how DTG will maintain operating records on the amounts (weight and volume) and types of waste received and removed from the LPL, and the number of vehicles delivering waste to the LPL. This section also addresses inspection reports and annual reports.

Several forms of documentation are required to be maintained for the LPL, each of which is outlined below. Copies of the following forms are presented in Appendix E.

#### A. Digital Volume Log

The Digital Volume Log includes the electronic invoices for each customer/vehicle. The log is maintained in the computer located in the scale office. The log records vehicle type, customer identification, material type and volume. Volumes are determined by use of a tape measure. This information is entered by the scale attendant each time a vehicle brings waste to the site and is used for billing purposes and to keep track of the cumulative volumes disposed of in the LPL and the total number of vehicles/transactions. The Facility scale is only used for the PCS and surface mine operation.

#### **B.** Daily Operations Log

The Daily Operations Log will include times of operator arrival and departure, weather conditions, site inspections of the LPL, waste inspections that resulted in identification of unacceptable waste, decisions made during the day, and significant deviations from this Operations Plan. The Daily Operations Log will also include any forms or reports that document special occurrences at the landfill. Examples would be fire inspection reports and maintenance records. Also, during covering of waste, the amount of soil, in cubic yards, brought onto the site for cover will be documented. The Daily Operations Log will also include the volume of salvage/recyclables that are hauled off-site to an appropriate recycling facility. The Daily Operations Log will be kept in the office and must be retained for a minimum of 5 years.

Site inspections will record the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action.

#### C. Annual Report

The Annual Report will be developed in accordance with Section XV and be maintained in the operating record.

#### XIII. Safety and Emergency Plan – WAC 173-350-400(6)(a)(x)

This section presents the safety and emergency plan for the LPL, including procedures for fire protection.

#### A. Fire Protection

Adequate soil will be stockpiled in an area near the active working face and be readily accessible in case of a fire. The LPL will be visually inspected every operating day for evidence of fire or smoke, including, but not specifically limited to visible emissions, settlement, or other evidence of combustion.

If at any time evidence of a fire is observed, the procedures will be followed as outlined below:

- The incident will be immediately reported to Site Manager, Brooks Franklin, at (425) 354-0154, who will report the incident to DTG Safety and Environmental Advisor, Paul Jerome, at (425) 903-0317.
- Soil only will be used to extinguish the fire. Water application is prohibited because of potential leachate generation.
- Soil will be applied using the onsite landfill equipment and other available mining equipment.
- The DTG Safety and Environmental Department will report the incident no later than 8:30 a.m. the following business day to Ecology at (509) 575-2490 and YHD at (509) 575-4040.
- DTG will increase the inspection schedule to 7 days per week until a period of at least 45 continuous and uninterrupted days has passed in which no visible emissions, or other evidence of combustion, are observed at any time, unless otherwise approved by the YHD.

For each visible emission, or other evidence of combustion, DTG will document the following after inspecting the LPL:

- Date and time of initial observation
- Duration of event
- Remedial and corrective actions taken
- Effectiveness of remedial and corrective actions
- Name, title, and signature of the inspector

DTG will submit all such records to Ecology and YHD within 5 working days of the initial observation and file a copy in the Daily Operations Log.

#### B. Communications

LPL operations staff will have personal communication devices (telephones, radios, etc.) while on site. The primary means of communication between LPL operations staff will be push-to-talk radios. The scale attendant within the scale office will be the primary resource

for off-site communications by telephone. In the event of an emergency, all actions will be coordinated with the Site Manager to ensure protection of customers, workers, the Facility, and the environment.

#### C. Explosive Gases

The response to the detection of explosive LFG will be in accordance with Section X.

#### D. Emergency Action Plan

An Emergency Action Plan has been developed for the LPL and is included in Appendix B.

#### XIV. Environmental Monitoring – WAC 173-350-400(6)(b)

A detailed Groundwater Sampling and Analysis Plan ("Groundwater Plan") for groundwater monitoring is included in Appendix C. The Groundwater Plan was prepared for Anderson, and DTG will continue to follow the Groundwater Plan.

The explosive gas monitoring plan is included in Section X. As the LPL is an unlined facility, leachate monitoring is not applicable. Surface water run-off is captured in the Facility evaporation pond without off-site discharge and does not require monitoring other than to confirm adequate available capacity which is performed as part of the site inspections.

#### XV. Annual Report – WAC 173-350-400(6)(c)

DTG will prepare and submit an Annual Report to YHD and Ecology by April 1 immediately following the reporting year. The Annual Report will include a status report and monitoring report submitted on forms provided by Ecology. The Annual Report will include:

- Name and address of the Facility
- Calendar year covered by the report
- Quantities and types of waste accepted at the LPL during the reporting year in cubic yards
- Estimate of the LPL waste density of received waste in pounds per cubic yard
- Quantities and types of waste exported from the LPL during the reporting year in cubic yards or tons
- Results of LFG and groundwater monitoring
- Applicable financial assurance reviews and audit findings

Appendix A – Site Plan


### Appendix B – Emergency Action Plan

### INTRODUCTION

The purpose of this plan is to ensure the health, safety, and welfare of employees at DTG and to reduce the adverse impact of possible emergencies on property and the community. This plan is adopted in accordance with Occupational Safety Standard 29 CFR 1910.38, WAC 296-24 and other applicable law.

An emergency situation is any situation in which there is injury, loss of life; significant property damage or emergency services are needed, including medical treatment, rescue, fire, and hazardous substance control and mitigation. This plan establishes programs of response to: Fire, earthquake, flooding, medical emergency, violent criminal threat, bomb threat, gas leak/power outage and environmental contamination.

### PROGRAM ADMINISTRATOR

The Site Manager is the Program Administrator.

The Program Administrator is responsible for:

- 1. Implementation of this Emergency Action Plan.
- 2. Employee training with respect to this Emergency Action Plan.
- 3. Ongoing compliance with this Emergency Action Plan.

All DTG employees must be familiar with and comply with this Emergency Action Plan. Failure to comply with this Plan may lead to disciplinary action, including suspension or termination of employment.

### EMERGENCY COORDINATOR

The Site Manager is the <u>Emergency Coordinator</u> in charge of DTG response to every emergency. The Emergency Coordinator must ensure appropriate measures are taken in the event of an emergency, notify appropriate authorities of the emergency, conduct all follow-up investigations and complete all necessary reports.

### EMERGENCY EQUIPMENT

- Emergency Action Plan
- Personal Protective Equipment
- Fire Suppression Equipment
- Eyewash Station
- Fully Stocked First Aid Kit (Office)
- Safety Data Sheets
- Hazardous Spill Kit

### EMPLOYEE TRAINING

All employees will be trained about the contents of this Emergency Action Plan when they are initially hired, on an annual basis and whenever this Emergency Action Plan is materially revised.

Mock emergency response drills will be performed on a periodic basis.

A copy of this Emergency Action Plan will be maintained in the site office, available to employees at all times.

### PERIODIC PLAN REVIEW

On an annual basis the Program Administrator will review this Emergency Action Plan and make any modifications or additions as may be necessary at such time.

### COMMUNICATION/ALARM SYSTEM

Should a perceived emergency situation arise, the following four steps are to be followed in response:

- 1. Whoever observes an emergency ("Reporting Party") must immediately **call 911** if the situation involves a medical emergency or a threat of medical emergency. If a phone is not accessible, the Reporting Party will contact the scale office by radio and the scale attendant will call 911.
- 2. The Reporting Party must inform the Emergency Coordinator by phone or by face to face contact.
- 3. The Emergency Coordinator will assess the situation, and based upon that determination, consult with internal company resources and/or call for outside assistance, including 911 emergency response if applicable.
- 4. The Emergency Coordinator will inform employees and visitors of the emergency situation as needed to protect human health and the environment.

### **EVACUATION PROCEDURES**

Employees will be notified by the Emergency Coordinator if evacuation of the facility is necessary. Should an evacuation of the premises be necessary, employees shall do the following:

- 1. Proceed to the nearest exit, notifying others as you go. Leave your personal belongings and company property as is. DO NOT WASTE TIME BY COLLECTING THESE ITEMS. Your safety is most important at this time.
- 2. Emergency escape routes are posted throughout the Facility and in scale office. A copy of the Emergency Escape Routes is included as **Attachment C**.
- 3. Proceed in a CALM AND ORDERLY fashion to the primary assembly area. If the primary assembly area is not a safe distance from the hazard, you will be informed to proceed to the secondary assembly area. The primary assembly area for DTG Recycle Yakima is the main driveway entrance.
- 4. Assist handicapped persons to the nearest exit and/or assembly area.

- 5. The Emergency Coordinator is responsible for ensuring that all personnel have evacuated the premises and are present in their designated assembly area.
- 6. The Emergency Coordinator will take roll call to account for all employees and visitors. Any unaccounted-for persons will be reported to emergency response professionals.
- 7. No person may re-enter the area or building until instructed to do so by the Emergency Coordinator. No person may leave the assembly area until instructed to do so by the Emergency Coordinator.

### FIRE RESPONSE

- 1. **Call 911** if the fire cannot easily be put out with a fire extinguisher or dirt.
- 2. Activate the fire alarm system, or communication process, to alert every one of the fire.
- 3. Inform the Emergency Coordinator of the following:
  - a. Type of fire.
  - b. Location of fire.
  - c. Extent and size of fire.
  - d. Injuries.
  - e. Action taken, if any
- 4. Use the fire extinguisher, water, or loader to put out small (waste basket size) fires, IF SAFE TO DO SO and if you have been trained to use the equipment. Never put your personal safety at risk.
- 5. Evacuate the building or area of the fire (if necessary) in accordance with Evacuation Procedures.
- 6. The Emergency Coordinator will meet the responding fire engine and direct them to the fire.
- 7. The Emergency Coordinator will complete all necessary reports and notifications to proper authorities and company personnel.
- 8. If clothing catches fire, STOP, DROP, AND ROLL. Stop where you are, drop to the floor, and roll over and over to smother the flames.

### MEDICAL EMERGENCY RESPONSE

The overall responsibility for medical assistance and rescue is that of the outside emergency response agencies, such as the fire department. **Attachment A** lists the emergency response agencies that may be needed.

Persons trained and certified in first aid/cardiopulmonary resuscitation ("CPR") may assist injured employees as long as these duties can be performed safely without personal risk to self or others. **Attachment B** lists personnel trained in basic first aid and CPR, if any.

- 1. Immediately notify the Emergency Coordinator.
- 2. Provide the following information:
  - a. Type of emergency.
  - b. Location of victim.
  - c. Extent of injuries or illness.
  - d. Number of injured/ill persons.
  - e. Actions taken, if any.

- 3. Locate first aid kit and administer first aid, if necessary (first aid and CPR to be administered by certified personnel only).
- 4. If outside medical assistance is needed, call 911.
- Serious injuries or illness such as head or spinal injuries, broken bones, serious burns, excessive bleeding, or chest pains require immediate emergency medical assistance -ALWAYS CALL 911.
  - a. A designated person will wait outside to meet and direct paramedics, ambulance, etc., to the location of the injured or ill person.
  - b. If the person has been exposed to a hazardous material, obtain a copy of the Material Safety Data Sheet ("MSDS") for the emergency provider.
  - c. Check employee's file for emergency contact name and phone number for Emergency Coordinator to notify of emergency situation.
- 6. Emergency Coordinator will complete all required reports and notifications to proper authorities, company personnel, or family member.
- 7. Non-serious injuries or illnesses (headache, cold, itching, nausea, etc.) may require the employee to be transported to the clinic or hospital for additional treatment.
  - a. The Emergency Coordinator will contact the clinic or hospital and inform them of the nature of the injury, or illness, and the number of employees being transported.
- 8. Nonwork-related injuries/illnesses should be referred to the employee's own personal physician for treatment.
- 9. Never leave the injured, or ill, person alone.

### EARTHQUAKE RESPONSE

### During the Earthquake

- 1. Remain calm.
- 2. Take cover **beside** a desk or table. Protect your head and neck.
- 3. Stay away from windows and objects which could fall on you.
- 4. Stay where you are DO NOT RUN OUTSIDE. Falling debris may cause injury.
- 5. If outdoors, stay in an open area DO NOT ENTER A BUILDING.

### After the Earthquake

- 1. Be prepared for aftershocks.
- 2. Check for injuries.
- 3. Administer first aid to injured parties if you are trained and willing to do so. Do not move them unless they are in immediate danger of further injury.
- 4. Stay put unless instructed to leave area by Emergency Coordinator.
- 5. DO NOT USE matches, electrical switches, or electrical appliances, in case of gas leaks.
- 6. The Emergency Coordinator will check for gas leaks, fires, broken water mains, etc.
- 7. The Emergency Coordinator will assess building for damage.

- 8. If necessary, or directed to do so by the Emergency Coordinator, evacuate the building. Be aware of structure damage that may exist and assist both the physically impaired and injured.
- 9. Turn a battery-operated radio, or phone, on to monitor the emergency situation, or condition of surrounding areas.

### NATURAL GAS LEAK/POWER-OUTAGE RESPONSE

- 1. Notify Emergency Coordinator immediately.
- 2. If a gas leak exists, open all doors and windows.
- 3. If directed to do so by the Emergency Coordinator, evacuate the building in accordance with Evacuation Procedures. The Emergency Coordinator will take roll call to account for all personnel.
- 4. The Emergency Coordinator will attempt to determine cause or problem, call for emergency assistance from fire department, Gas Company, electric company, or other necessary source.
- 5. If a gas leak, DO NOT LIGHT MATCHES, LIGHTERS, USE ELECTRICAL APPLIANCES, OR ELECTRICAL SWITCHES.

### FLOODING RESPONSE

- 1. Notify the Emergency Coordinator. The Emergency Coordinator will assess extent of damage and determine further actions to be taken.
- 2. The Emergency Coordinator will turn off all electrical equipment, and ensure that all electrical power has been de-energized in flooded area.
- 3. If necessary, evacuate the building in accordance with Evacuation Procedures.

### VIOLENT/CRIMINAL BEHAVIOR

- 1. Be alert to suspicious situations, or persons, and report them immediately to your supervisor. If you notice a suspicious situation, or person, loitering around, immediately notify the Site Manager.
- 2. If you are the victim, or are involved in any violent or criminal act, as soon as possible, notify the police and report the incident. Inform your immediate supervisor.
- 3. If you witness a violent or criminal act, immediately notify the police and report the act. DO NOT GET INVOLVED.
- 4. DO NOT TAKE ANY UNNECESSARY CHANCES. REMAIN CALM AT ALL TIMES.

### BOMB THREAT RESPONSE

- 1. Any person receiving a phone call that a bomb, or other explosive device, has been placed on the premises is to ask the caller the following questions:
  - a. When is the bomb going to explode?
  - b. Where is the bomb right now?
  - c. What does the bomb look like?
  - d. What kind of bomb is it?
  - e. What will cause the bomb to explode?
  - f. Why was the bomb placed?
  - g. What is your name, address, phone number, etc.?

- 2. Write down the answers to the above questions.
- 3. Call 911.
- 4. Notify the Emergency Coordinator.
- 5. If the bomb threat is received by mail, do not further handle the letter, envelope, package, etc., notify the Emergency Coordinator immediately.
- 6. If requested by the Emergency Coordinator, evacuate in accordance with Evacuation Procedures.

### HAZARDOUS SUBSTANCE EXPOSURE RESPONSE

- 1. Notify the Emergency Coordinator.
- 2. In case of chemical inhalation:
  - a. Remove the victim from the area into fresh air.
  - b. **Call 911** if outside assistance is required.
  - c. Provide CPR if the employee stops breathing (CPR to be administered by certified personnel only).
  - d. Obtain copy of MSDS for medical provider.
- 3. In case of eye contact with chemical
  - a. Review copy of MSDS sheet for proper eye washing instructions and follow instructions. Note that most chemicals are treated by flushing with water, but that in some cases, water is not recommended. PAY ATTENTION TO THE MSDS.
  - b. Locate eye wash, shower, or fountain.
  - c. If advised, rinse the eye with cold water for a minimum of 15 minutes.
  - d. **Call 911,** or transport to clinic or hospital, if necessary.
  - e. Obtain copy of MSDS for medical provider.
- 4. In case of skin contact with chemical
  - a. Review copy of MSDS sheet for proper instructions and follow instructions. Note that most chemicals are treated by flushing with water, but that in some cases, water is not recommended. PAY ATTENTION TO THE MSDS.
  - b. Flush the skin with cold water for a minimum of 15 minutes.
  - c. Remove contaminated clothing.
  - d. Follow additional instructions on MSDS.
  - e. **Call 911,** or transport to clinic or hospital if necessary.
- 5. In case of ingestion of hazardous material
  - a. Review copy of MSDS for instructions.
  - b. Contact Poison Control Center for emergency procedures.
  - c. **Call 911**, or transport to clinic or hospital if necessary.

<u>REMEMBER</u>: TO ALWAYS CHECK MSDS FOR THE NECESSARY FIRST AID OR MEDICAL TREATMENT INSTRUCTIONS. PROVIDE COPY OF MSDS TO MEDICAL PROVIDER.

### HAZARDOUS SUBSTANCES SPILL and REMOVAL RESPONSE

- 1. Notify the Emergency Coordinator immediately.
- 2. Identify source of spill.
- 3. Cover or dike around spilled material to prevent from getting into stormwater or sewer drains using materials in the spill kit, or other available materials.

- 4. Absorb spilled material. The absorbing material must be compatible with the spilled material. Apply absorbent from the outer edge of the spill to the center. Use a shovel for longer reach.
- 5. Consult with Site Manager for further direction on cleanup and disposal. Site Manager, in consultation with staff or outside environmental experts, will direct all clean-up, disposal (through a Hazardous Waste Vendor) and governmental reporting activity in compliance with applicable laws and regulations.

### ASBESTOS

DTG Recycle – Yakima: Asbestos Information and Response Program is included as **Attachment D**.

### \*\*\*\*\*\*

### ATTACHMENTS TO THE EMERGENCY ACTION PLAN

- Emergency Action Plan Quiz
- Attachment A: Emergency Contact Numbers
- Attachment B: First Aid/CPR Trained Personnel
- Attachment C Emergency Evacuation Routes
- Attachment D: DTG Recycle Yakima: Asbestos Information and Response Program

# **EMERGENCY ACTION PLAN QUIZ**

- 1. Who is the Emergency Coordinator?
- 2. Who do you notify if an emergency arises while you are at work?
- 3. What is the first thing you would do if you noticed a fire?
- 4. What are the Evacuation Procedures?
- 5. What do you do if your clothing catches fire?
- 6. What do you do if a co-worker is injured by equipment while working?
- 7. What do you do if you witness a violent or criminal act?
- 8. In the event of a chemical exposure what is one thing that you should do regardless of the type of exposure (inhalation, skin, and eye)?
- 9. Where should you go when you evacuate the building?
- 10. What do you do in an earthquake?

### ATTACHMENT A:

### **EMERGENCY CONTACT NUMBERS**

Name/Agency	Telephone Number	
Site Manager – Brooks Franklin	425-354-0154	
Safety and Environmental Advisor – Paul Jerome	425-903-0317	
Emergency Notification Numbers:		
Ambulance/Police/Fire	911	
Non-Emergency Fire	509-575-6060	
Non-Emergency Police	509-575-6200	
Insurance Company — Darrin Mroz	619-938-2536	
Public Health — Yakima Health District	509-575-4040	
National Response Center	800-424-8802	
Occupational Safety & Health Administration (OSHA)	800-321-6742 24 hrs.	
State Emergency Response Commission: Division of Emergency Management Spill Response Center	800-258-5990	
Washington Dept. of Ecology	509-575-2490	
Yakima Regional Clean Air Agency	509-834-2050	
Washington Utilities & Transportation Commission	800-562-6150	
Washington Poison Center (WAPC)	800-222-1222	

### ATTACHMENT B:

### FIRST AID/CPR TRAINED PERSONNEL

Brooks Franklin Wendy McConnell Darryl Melton Jarod Stone Beatrice Sybouts Leonard Cloutier Jesus de Santo Derek Evans

### ATTACHMENT C:

### **EMERGENCY EVACUATION ROUTES**

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### ATTACHMENT D:

### ASBESTOS INFORMATION AND EMERGENCY RESPONSE PROGRAM

### 1. ASBESTOS BACKGROUND

Asbestos is a group of naturally occurring minerals. Asbestos was used in a variety of building materials because of the fiber's unique properties. Asbestos fibers have high tensile strength and do not rot. These fibers are chemically inert and acid- and heat-resistant, which makes them a good insulating material component. Most airborne asbestos fibers are very small and **cannot be seen by the naked eye**. Approximately two million fibers could rest on the head of a pin. It is these properties which make asbestos fibers a health hazard if inhaled into the lung. Regulations were created in the 1970s requiring asbestos to be removed from buildings prior to renovation or demolition. The regulations require that asbestos materials be removed using wet methods, and that asbestos waste is kept wet until it arrives at an approved disposal facility.

A <u>friable material</u> is a material that can be reduced to a powder by hand pressure. Friable asbestos materials may release fibers into the air if disturbed. If asbestos fibers become airborne, they remain in the air for a long time before settling out. Asbestos occurring in friable material are particularly dangerous.

### 2. ASBESTOS IN BUILDING MATERIALS

Asbestos has been used in over 3,000 building products. Suspect Asbestos Containing Materials (SACM) include the following when manufactured prior to 1980:

Cement Pipes	Elevator Brake Shoes
Cement Wallboard	HVAC Duct Insulation
Cement Siding	Boiler Insulation
Asphalt Floor Tile	Breeching Insulation
Vinyl Floor Tile (typically 9x9)	Ductwork Flexible Fabric Connections
Vinyl Sheet Flooring	Cooling Towers
Flooring Backing	Pipe Insulation (corrugated air-cell, block, etc.)
Construction Mastics	Heating and Electrical Ducts
Acoustical Plaster	Electrical Panel Partitions
Decorative Plaster	Electrical Cloth
Textured Paints and Coatings	Electric Wiring Insulation
Ceiling Tiles and Lay-in Panels	Chalkboards
Spray Applied Insulation	Roofing Shingles
Blown-in Insulation	Roofing Felt
Fireproofing Materials	Base Flashing
Taping Compounds (thermal)	Thermal Paper Products
Packing Material (for wall and floor penetrations)	Fire Doors
High Temperature Gaskets	Caulking/Putties
Laboratory Hoods/Tabletops	Adhesives

Laboratory Gloves	Wallboard
Fire Blankets	Joint Compounds
Fire Curtains	Vinyl Wall Coverings
Elevator Equipment Panels	Spackling Compounds

### 3. ASBESTOS RESPONSE AT DTG Recycle – Yakima

In the event SACM arrive, proceed as follows:

- 1. If the SACM is still within its delivery vehicle, advise the driver that the load contains SACM. If the driver has documentation that the load is clean, retain a copy of the documentation in our files and ask DTG's Safety and Environmental Advisor to review and approve the load before it is tipped. If the driver does not have documentation, enter information about the unacceptable load in our computer system; give the driver a copy of the Transfer Stations for Unacceptable Materials information sheet. <u>Observe the vehicle until it exits the DTG Recycle Yakima facility</u>.
- 2. If the material is not within its delivery vehicle, immediately notify the Site Manager and Safety and Environmental Advisor about the SACM. All subsequent DTG Recycle Yakima operations regarding the SACM will be directed by the Safety and Environmental Advisor.
- 3. Do not disturb or handle SACM. DO NOT push with equipment.
- 4. Quarantine off area with Hazard tape.
- 5. Keep all persons upwind; if unable to keep up wind you must evacuate area.
- 6. Contact hauler to find who is generator of material, or directly contact generator if known.
- 7. Verify with generator if material was tested for asbestos content. Request good faith survey and lab test results.
- 8. Document chain of events.
- 9. If materials are verified **not to** contain asbestos with lab test data continue operations, if materials are verified to contain asbestos, keep area quarantined off.
- 10. If materials contain 1% by volume or greater of asbestos, the materials will be required to be abated by a certified contractor. Generally, the generator is required to initiate the abatement process. DTG Recycle Yakima **employees are not certified to abate asbestos.**
- 11. The Site Manager will consult with contracted environmental experts and notify regulator agency(ies) as required by applicable law.
- 12. If generator does not immediately start the abatement process, DTG Recycle Yakima will take the lead and arrange for a certified asbestos abatement contractor to remove the asbestos containing material and invoice the hauler/generator for all costs incurred.

### Appendix C – Groundwater Sampling and Analysis Plan

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Anderson Pit Limited Purpose Landfill Yakima, Washington Ground Water Sampling and Analysis Plan

**Prepared for:** 

**R.W. Beck** 

On behalf of: Anderson Rock & Demolition Pits

**Prepared By:** 

# HWA HWA GEOSCIENCES INC.

HWA Project No 2005 120

March 21, 2007

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### Anderson Pit Limited Purpose Landfill Yakima, Washington Ground Water Sampling and Analysis Plan

### **1.0 INTRODUCTION**

This Sampling and Analysis Plan (SAP) is for ground water monitoring at the Anderson Pit Limited Purpose Landfill (LPL) under Chapter 173-350 WAC. This SAP:

- 1. Specifies procedures for field sampling activities.
- 2. Identifies quality assurance (QA) procedures to be implemented during sampling activities and laboratory analyses.
- 3. Meets the requirements of WAC 173-350-500 for sampling and analysis plans.

### **1.1 MONITORING REQUIREMENTS**

Monitoring well MW-2, MW-3, and possibly the Barnes '03 well (pending access and permission to sample) will serve as downgradient monitoring locations. In lieu of an established upgradient monitoring well, intrawell statistical analysis will be used to determine compliance. To establish baseline water quality conditions, these wells will be sampled for eight rounds over the course of one year, but not less than one month apart. After baseline levels have been determined, quarterly monitoring will commence, continuing through the active life of the facility (including post closure). An alternate sampling frequency (requiring a permit modification) may be recommended based on results.

### **1.2 PROJECT ORGANIZATION**

Individuals responsible for ensuring the quality of the field operations and the collection of data are identified in this section. Anderson Rock & Demolition Pits (Anderson) will provide oversight of all project activities and will be the point of contact with Ecology. Sampling activities, data evaluation, and reporting will be performed by Anderson staff or their consultants. Laboratory analysis will be done by Ecology-certified laboratories.

### 2.0 SAMPLING AND ANALYSIS

The monitoring well locations are shown on Figures 3 and 4 of the *Geotechnical & Hydrogeologic Investigation Report, Anderson Pit Limited Purpose Landfill, Yakima, Washington.* Parameters to be analyzed (per WAC 173-350-500) are summarized in Table 1.

Field Parameters	Geochémical Indicator	Leachate Indicators
pH Specific country t	Alkalinity	Ammonia
Specific conductance	Bicarbonate	Total organic carbon (TOC)
	Calcium	Total dissolved solids (TDS)
Static water level	Chloride	
	Iron	
	Magnesium	
· · · ·	Manganese	
	Nitrate	
	Sodium	· · · ·
	Sulfate	

 Table 1

 Proposed Monitoring Parameters

Metals analyses will be for total metals (unfiltered samples). Dissolved metals samples (filtered samples) should also be collected, and may be analyzed depending on total metals results, or if samples are turbid.

# 2.1 SAMPLE COLLECTION METHODOLOGY

### 2.1.1 GROUND WATER MONITORING WELLS

Monitoring wells will be purged before sample collection to obtain ground water samples that are representative of the formation water rather than stagnant water from the well casing. Ground water that has occupied the well casing is often under oxidizing conditions, and thus may be chemically different from true formation water.

Monitoring wells will be purged and sampled using low-flow purging methods (Barcelona et al. 1994). Sampling staff will measure ground water levels to the nearest 0.01-foot using a decontaminated electronic well probe prior to purging. Prior to collection of ground water samples, the wells will be purged by pumping a small volume of water to ensure sampled water represents aquifer conditions. The volume pumped will be determined in the field based on stabilization of field parameters: specific conductance, dissolved oxygen, and pH. Wells will be purged using dedicated stainless steel/Teflon bladder or displacement pumps, pumping at a rate not to exceed 0.5 liters/minute (0.132 gallons/minute). At a minimum, two pump and tubing volumes will be purged  $(1/2^{\circ} I.D. tubing = 0.010 gallon/lineal foot)$ . Domestic water wells will be sampled at the nearest point to the well using the existing submersible electric pump.

Samples will be collected once the parameter values have stabilized over the course of three sets of measurements as follows:

specific conductance	$10 \ \mu S$
dissolved oxygen	2 mg/L
pH	0.1

If a well can be pumped dry prior to reaching the desired purge volume, it will be allowed to recover prior to sampling, using the minimum time between purging and sampling that would allow collection of sufficient sample volume. Samples will be pumped directly into the appropriate containers, as provided by the laboratory. A Field Data Sampling Sheet (provided in Appendix A) will be filled out for each well. New tubing will be used for each well.

Dissolved metals samples will be filtered through a disposable 0.45-micron filter at the time of sample collection. The filters will attach directly to the discharge tube of the sampling pump. Each in-line filter will be used only once.

After collection, all samples will be labeled, chilled in a cooler to 4°C, and shipped to the testing laboratories for analysis. Full chain-of-custody and field documentation procedures will be employed, as described in Section 2.6. The laboratory will analyze the water samples for the constituents listed on Table 2.

Analytical Parameter	Method	PQL (mg/L)	Required Bottle	Preservative	Holding time
Alkalinity	310.1	5	250 ml HDPE	Cool 4º C	14 days
Bicarbonate	SM2320	5			
Chloride		0.3			
Sulfate	300.0	0.3	250 ml HDPE	Cool 40 C	28 days
Nitrate		0.03			
Calcium		1			
Iron		0.1			
Magnesium	200.7/6010	1	500 ml HDPE	HNO3 to pH<2	6 months
Manganese		0.01	-		
Sodium		1			
тос	415.1	0.5	250 ml HDPE	H2SO4 pH<2	28 days
Ammonia	350.1	0.04			ļ
TDS	160.1	10	1000 ml HDPE	Cool 4º C	7 days

# Table 2 Analytical Methods and Bottle Requirements

### 2.1.2 FIELD FILTERING

Samples collected for dissolved constituent analysis must be filtered through a 0.45-micron filter. The filters will attach directly to the discharge tube of the sampling pump. The filter must be changed between sample points, or more frequently if clogging occurs. Where in-line filtration is not possible, prefiltration bottles may be used to collect the samples. Prefiltration bottles must be obtained from the laboratory with the sample coolers and identified with the bottle request. Prefiltration bottles, used for vacuum or pressure filtering, will not be used for more than one well. The use of prefiltration bottles must be noted on the Chain-of-Custody form in the comments section. Samples that have been field-filtered or that require laboratory filtering must be noted on the Chain-of-Custody forms in the comments section. The laboratory will note which samples require filtering on the individual bottle labels.

### **2.1.3 SAMPLE COLLECTION**

When filling the sample bottles, the following procedures and precautions will be adhered to:

- 1. Sample bottles will be filled directly from the bailer, dedicated pump, or filter apparatus, with minimal air contact.
- 2. Bottle caps will be removed carefully so that the inside of the cap is not touched. Caps must never be put on the ground.
- 3. The sampling team will wear appropriate nonpowdered latex or nitrile gloves (PVC or vinyl gloves can leave trace levels of phthalate or vinyl chloride). Gloves will be changed between wells or more often.
- 4. Tubing or hoses from the sampling systems must not touch or be placed in the sample bottles.
- 5. Sample bottles, caps, or septums that fall on the ground before filling will be discarded.

Table 2 shows sample bottle requirements and preservatives. The analytical laboratory will provide the sample containers and necessary preservation.

### 2.1.4 WATER LEVEL MONITORING

Ground water levels at each of the monitoring wells will be measured at the start of each sampling round in order to monitor changes in seasonal or long-term water elevations and ground water flow directions. Ground water levels in all wells will be measured in as short a time frame as possible, to minimize the effects of temporal ground water level variations.

### 2.2 EQUIPMENT DECONTAMINATION

In order to mitigate the potential for cross-contamination, all nondedicated, sample-contacting, and downhole equipment used in the collection and sampling processes will be decontaminated

before sample collection. Included are nondedicated pumps, nondedicated bailers, ground water level measurement devices, and nondedicated filtering apparatuses.

A water level probe must be dedicated to ground water monitoring well use only. Under no circumstance shall this dedicated probe be used to measure other fluid levels (e.g., leachate).

The following steps will constitute the decontamination procedure:

- 1. Wash items in a solution of non-phosphate (e.g., Alconox) detergent and tap water
- 2. Rinse with tap water
- 3. Rinse with deionized water
- 4. Air dry in a clean environment

Decontaminated equipment will be stored and transported in clean containers or wrapping.

# 2.3 SAMPLE PRESERVATION, STORAGE, AND SHIPMENT

### 2.3.1 SAMPLE PRESERVATION

The sample containers (including preservative, if required) will be prepared and provided by the analytical laboratory. Samples will be preserved consistent with analytical laboratory recommendations. After each bottle is filled and capped, the sample container will be inverted to ensure complete mixing of the sample with the preservative. The sample container should not be shaken.

### 2.3.2 TEMPERATURE CONTROL

The sample container and samples will be cooled to 4°C, from the time the sample is collected through analysis. Samples will be maintained in temperature-regulated refrigerators, in coolers, or in sample coolers containing double-bagged or commercially frozen icepacks. The icepacks will be frozen solid before use.

### 2.3.3 SAMPLE PACKING AND STORAGE

Before the sample bottles are packed into the shipment coolers, the sample designations will be recorded in the appropriate spaces on the Chain-of-Custody form. After the samples are collected and the preservatives are added (when applicable), the bottles will be capped and placed in the sample cooler. The frozen icepacks will be placed into the sample cooler such that they are not in direct contact with the sample bottles. Glass containers should not be packed in contact with each other. Bottle holders, cushions, or bubble wrap will be used for glass bottles to protect them from breakage.

Bottles will be wiped clean with paper towels before placement in the sample cooler. The sample cooler must be kept as clean as possible to minimize the potential for cross-contamination. Bottle caps will be checked to ensure they are tight and will not become loose when inserted in the cooler. Bottle caps will not be taped.

The Chain-of-Custody form will be placed in a plastic bag, sealed, and placed inside the sample cooler or taped to the inside lid of the cooler. A copy of the Chain-of-Custody form will be retained for verification.

Samples will be stored at 4°C, in an enclosed cooler or dedicated refrigerator where possible, before shipment to the laboratory. Samples will be shipped daily to the laboratory to ensure proper temperature control and that holding time requirements are met.

### 2.4 QUALITY ASSURANCE/QUALITY CONTROL

Samples will be collected and analyzed with sufficient quality assurance/quality control (QA/QC) to ensure representative and reliable results. The overall QA objective for this investigation is to ensure that all decisions based on laboratory and field data are technically sound, statistically valid, and properly documented. Specific QA protocols will be executed and are described for all activities related to the collection of samples, the analyses of these samples by the laboratory, and the handling of data generated during the investigation. There are two parts to the QA/QC program for this project: field and laboratory.

### 2.4.1 FIELD

Field QA/QC includes proper documentation of field activities and sampling/handling procedures, as described in Section 2.6. Field QA/QC samples will consist of the following:

- One duplicate per sampling round
- One field blank per sampling round (optional analysis based on sample results)

### **2.4.1.1 Duplicates and Split Samples**

Duplicate samples will be collected from a well with known or suspected contamination.

Duplicates are used to confirm analytical results from a given sample point. Duplicate samples are collected in the field using a matching set of laboratory-supplied bottles and sampling from the selected well, as requested. Each duplicate should be sampled by alternating between the regular and the duplicate sample bottles, proceeding in the designated sampling order (VOCs first). The well where the duplicate is collected must be identified on the field sampling data sheet. All duplicates shall be blind-labeled (i.e., the well designation is not listed on the sample bottle or Chain-of-Custody form). Once a duplicate is collected, it is handled and shipped in the same manner as the rest of the samples. Duplicate results will be reported in the laboratory results as separate samples, using the designation DUP-(#).

Split samples are collected when a well is sampled with a third party (e.g., Ecology). Split samples should be collected using the same method as a duplicate, alternating between sample bottles, and proceeding in the designated sampling order. The well at which a split sample is collected must be identified on the field sampling data sheet. Also note the condition of the bottles or preservatives, the sample-collection method (if different from the standard), and the selected agency laboratory.

### 2.4.1.2 Trip Blanks

Trip blanks are used to detect contamination that may be introduced in bottle preparation, in transit to or from the sampling site, or in the field. Trip blanks are usually used to detect VOC contamination, and are not anticipated as no VOC analysis is planned.

### 2.4.1.3 Field Blanks

Field blanks are used to detect contamination that may be introduced in the field. Field blanks will be prepared in the field by pumping laboratory reagent-quality water through new tubing and into the equipment blank bottles. The well at which the equipment blank is prepared must be identified on the field sampling data sheet.

Field blank results will be reported in the laboratory results as separate samples, using the designation FB-(#).

### 2.4.2 LABORATORY

Laboratory QA/QC samples may consist of the following, depending on the analysis:

- Method blanks
- Duplicates
- Instrument calibration verification standards
- Laboratory control samples
- Surrogate spiked samples
- Performance evaluation QC check samples

### 2.4.3 DATA EVALUATION

Data evaluation will include checking holding times, method blank results, surrogate recovery results, field and laboratory duplicate results, completeness, detection limits, laboratory control sample results, and Chain-of-Custody forms. After the data has been checked, it will be entered into the project database with any assigned data qualifiers.

# 2.5 FIELD DOCUMENTATION AND CHAIN-OF-CUSTODY

The following sections describe the recording system for documenting all site field activities, and

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the sample chain-of-custody procedures.

### 2.5.1 FIELD DOCUMENTATION

An accurate chronological recording of all field activities is vital to the documentation of any environmental investigation. To accomplish this, field team members will maintain field log books and data sheets providing a daily record of significant events, observations, deviations from the sampling plan and measurements collected during the field activities.

### 2.5.1.1 Field Sampling Data Sheet

A field sampling data sheet (example in Appendix A) will be filled out for each sample point. This sheet contains information regarding site and well conditions, sampling and purging procedures, and field measurements. At a minimum, the following information must be documented:

- 1. **Purging Information**, including date, time, well number, casing volume, elapsed time, discharge color (if different than for sampling), water level before and after purging. Note if the well was dry, purged dry, or was otherwise impossible to sample.
- 2. Purging and Sampling Equipment, including pump type and tubing material.
- 3. Field Measurements, including fluid surface elevation (depth to ground water or to leachate), temperature, pH, dissolved oxygen, and specific conductance.
- 4. Additional Field Measurements, as necessary.

### 2.5.1.2 Field Observations

The comments section on the field sampling data sheet will include such field observations as the following:

- Weather condition: wind direction, speed, upwind activities (ensure that vehicles or gasoline-engine generators or compressors are not upwind of sampling activities), temperature, and barometric pressure (if required).
- Sample appearance, including odor, color, and turbidity:
  - <u>Odor</u>: (e.g., rotten eggs, earthy, strong, moderate, slight, metallic, landfill gas *do not sniff sample*).
  - <u>Color</u>: True "color" is the color after turbidity has been removed, if samples are filtered. True color may be caused by metallic ions, humus, peat, or industrial chemicals. Hold the sample up to the light and describe the true color in as much detail as possible (color charts are acceptable descriptive methods). If samples are not filtered, then color may be a function of turbidity.
  - <u>Turbidity</u> (regardless of whether turbidity measurements are taken):
    - None: sample is clear.
    - Trace: sediment slightly clouds or colors sample; does not accumulate in bottle.

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- Moderate: definite cloudiness, sediment accumulates at bottom of bottle.
- High: muddy or dark brown appearance.
  - When a turbidity-measuring device is used, measurements must be provided in nephelometric units.
- Reference point for well measurements (i.e., is it clearly marked on top of casing?).
- Well I.D. where the field blank or duplicate sample is collected.
- Calculations for purge volumes and temperature conversions. Note when wells are purged dry.
- Duplicate field measurement results.
- Other conditions, such as sample splits with regulatory agencies, potential safety or health hazards (e.g., landfill gas in well).

### 2.5.1.3 Sample Certification

The bottom of the field sampling data sheet must be signed to certify that the sampling procedures were in accordance with those described in this sampling plan. The person certifying the sampling assumes full responsibility that the sampling process satisfied the required criteria.

### 2.5.1.4 Maintenance Conditions at Well

The condition of the well and its surrounding area must be observed and problems and changes recorded on the field sampling data sheet each time the well is sampled. The following items, at a minimum, will be checked:

- Presence and condition of the well's identification sign
- Whether the well's protective casing is locked and whether the key works
- Well integrity
- Physical surroundings (e.g., high weeds, standing water, cleanliness, nearby activities)
- Condition of the pump and appurtenances
- Obstructions or kinks in the well casing.
- Presence of water in the annular space
- Grease or other unnatural substances on the top of the well or the threaded caps
- Whether the cap fits securely to prevent the introduction of contaminants
- Evidence of natural contamination (e.g., animal or insect parts in the well)
- Condition of well guard post and concrete pad

The condition of flush-mounted well head covers and locks must also be recorded once per year. Other items that will be noted include any physical alterations to the well, any alterations to the

surrounding soils and associated drainage, or any other notable changes in conditions near the well.

Notify the project manager immediately of any conditions that would prevent or preclude sampling or affect sample integrity. Any damage to a monitoring device will be reported to Ecology in writing within 14 days of its discovery, along with a description of the proposed repair or replacement measures and a schedule for completion of the work.

### **2.5.2 SAMPLE IDENTIFICATION**

Following sample collection, field personnel will affix labels to each sample container. Samplers will use waterproof ink, plastic bags, or clear tape to ensure labels remain legible even when wet. A sample label form that may be copied on to adhesive label paper is provided in Appendix A. Samplers will record the following information on the labels:

- Project name and number
- Sample identification number
- Date and time of collection
- Required test methods
- Name of sample collector

Sample numbering will follow the following format:

MW-29-0701 = monitoring well MW-29 collected in July 2001

DUP 1, DUP 2, etc. = duplicate (do not indicate which well a duplicate is from)

TB 1, TB 2, etc. = trip blank (indicate matrix for all blanks, e.g., ground water, surface water)

FB 1, FB 2, etc. = field blank

### 2.5.3 CHAIN-OF-CUSTODY RECORD

The objective of the chain-of-custody procedures is to allow the tracking of possession and handling of individual samples from the time of field collection through laboratory analysis. Once a sample is collected, it becomes part of the chain-of-custody process. A sample is "in custody" when: (1) it is in someone's possession, (2) it is within visual proximity of that person, (3) it is in that person's possession, but locked up and sealed (e.g., during transport), or (4) it is in a designated secure sample storage area. Sampling staff will complete a Chain-of-Custody form, which will accompany each batch of samples. The record will contain the following information:

- Project name and number
- Names of sampling team members
- Requested testing program

- Required turnaround time
- Sample number
- Date and time collected
- Sample type
- Matrix
- Number of containers
- Special Instructions
- Signatures of persons involved in the chain of possession

When sample custody is transferred to another individual, the samples must be relinquished by the present custodian and received by the new custodian. This will be recorded at the bottom of the Chain-of-Custody form where the persons involved will sign, date and note the time of transfer. A Chain-of-Custody form is provided in Appendix A.

Sampling team members will keep sample coolers in locked vehicles while not in active use or visual range. If couriers are used to transport samples, Chain-of-Custody seals will be affixed to sample coolers.

### 2.6 INVESTIGATION-DERIVED WASTE

Purge water from the wells will be collected and discharged to ground. Solid waste (e.g., disposable bailers, gloves, etc.) will be disposed of as ordinary municipal waste.

# 2.7 CALIBRATION AND USE OF METERS

Before being taken to the field, equipment must be cleaned and checked for malfunctions. Meters must be calibrated each morning before they are used in the field, following manufacturers' procedures. Equipment will be calibrated at least daily. All field monitoring equipment will be calibrated consistent with manufacturers' procedures using instrument calibration standards prepared according to the manufacture's specifications. In all cases, proper documentation must be made of all calibration procedures for each sampling event, including calibration methodology (one- or two-point calibration, difference, standard concentration, and expiration date).

Logbooks should be maintained for all field meters. The logbooks must contain the same information as those for permanent laboratory instruments (serial number, name and model of meter, year purchased, etc.). The books also must contain quality control (QC) results, maintenance performed by the factory, and calibration notes for each day the equipment is used. Instruments used to measure pH and electrical conductivity should be calibrated at least once each day of sampling. Temperature-measuring devices should be calibrated against a standardized laboratory thermometer at a frequency recommended by the manufacturer.

Additional data (e.g., turbidity, dissolved oxygen) should be calibrated in accordance with manufacturer recommendations and documented.

### 2.8 FIELD MEASUREMENTS

### 2.8.1 STATIC WATER LEVEL MEASUREMENTS

The depth-to-water should be recorded to the nearest hundredth of a foot (0.01 ft). Water levels should be measured before and after purging to assess drawdown effects at each well, and to produce a representative static ground water contour map. To alleviate potential errors, previous water level data should be used for comparison during field activities. Water levels are preferably measured before purging a well and as close in time as possible, to minimize interference from drawdown or barometric pressure effects.

### 2.8.2 DEPTH-OF-WELL MEASUREMENTS

The total depth of the well will be measured in wells where there is visible or significant turbidity, or when tampering is noted. Also, evaluate and respond to any excessive sediment accumulation.

The well depth measurements should be compared with the pump or tubing intake depths. The intake should be located at the middle of the screen or lower, depending on the screen length and well recharge characteristics, maintaining a minimum of two feet (where possible) between the pump intake and the bottom of the well. If the intake location in a well does not appear appropriate for collecting representative samples, adjust the placement.

### **3.0 DATA EVALUATION**

### **3.1 STATISTICAL ANALYSIS**

Background / baseline water quality values for each of the parameters analyzed will be calculated by statistical methods in accordance with the Ecology Implementation Guidance for the Ground Water Quality Standards, (Ecology, 1996). The 95 percent upper tolerance interval (with a 95% confidence) for each of the parameters will be calculated using chemical data collected during the monitoring period.

Significant increases over background will be calculated by variance (ANOVA) analysis in accordance with the Statistical Guidance for Ecology Site Managers (Ecology 1992). Control charts may also be used for appropriate sample populations. Any observed trends over time will be correlated to precipitation, ground water levels, or seasonal pumping of nearby high capacity irrigation wells (e.g., Herke) to account for potential confounding variables.

Determination of specific statistical methodologies to establish compliance should be deferred until needed, based on the sample population distribution characteristics (e.g., normal,

lognormal, variance, number of non-detects, etc.), although methods used will be in accordance with Ecology Guidance.

### **3.2 CONTINGENCY PLAN**

If statistical analyses determine a significant increase over background, Anderson will notify the health department within thirty days of receipt of the sampling data, and resample the well of interest. Anderson will also establish ground water protection standards using the ground water quality criteria of chapter 173-200 WAC, *Water Quality Standards for Ground Waters of the State of Washington*, as appropriate. If the increase is not attributed to a source other than the landfill, natural variation in ground water quality, or an error in sampling, analyses, or statistical evaluation, AND the concentrations of constituents meet the criteria established by chapter 173-200 WAC, Anderson will assess and evaluate sources of contamination; and implement remedial measures in consultation with the health department and Ecology. If concentrations of constituents exceed the criteria established by chapter 173-200 WAC, Anderson will characterize the release by installing additional monitoring wells, assess and, if necessary, implement appropriate intermediate measures to remedy the release (with approval by the health department and Ecology) and evaluate, select, and implement remedial measures as required by chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation, where applicable.

### **3.3 REPORTING**

Anderson will submit an annual report to the health department and Ecology by April 1st of each year. The annual report will summarize and interpret the following information (for all sampling events):

- Ground water monitoring laboratory and field data
- Statistical analysis results, findings, and time/concentration plots
- A summary of concentrations exceeding chapter 173-200 WAC criteria
- Static water level readings, ground water potentiometric surface maps, ground water flow rate and direction
- Geochemical evaluation including cation-anion balancing and trilinear and/or stiff diagraming noting any changes or trends in water chemistry for each well during the year

### 4.0 REFERENCES

Barcelona, Michael J., Wehrmann, H. Allen, and Varljen, Mark D. 1994. Reproducible Well Purging Procedures and VOC stabilization Criteria for Ground Water Sampling. Ground Water Vol. 32, No. 1, pp. 12-22. January-February.

Washington State Department of Ecology Toxics Cleanup Program, 1992, Statistical Guidance for Ecology Site Managers (& MTCAStat 3.0 Software, revised 1997), Publication 92-54, August, 1992.

Washington State Department of Ecology Implementation Guidance for the Ground Water Quality Standards April 1996, Ecology Publication #96-02

# APPENDIX A

# SAMPLING DOCUMENTATION

**Chain-of-Custody Form** 

**Field Sampling Data Sheet** 

Sample Labels

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# HWA GEOSCIENCES INC.

19730 64<sup>th</sup> Ave. W., Suite 200, Lynnwood, WA 98036 (425)774-0106 4500 Kruse Way, Suite 300, Lake Oswego, OR 97035 (503)675-2424

	Chain	of	Cu	sto	ody		
	-				2-1	-	

and Laboratory Analysis Request

DATE:

PAGE: of

PROJECT NAME:				#:						AN	VAL'	YSIS	RE	QUE	EST	ED				· ]			
SITE CODE:		0											1					1	Γ				
SAMPLERS NAME		<u>,                                     </u>		PHONE:	· · · · · · · · · · · · · · · · · · ·																		
SAMPLERS SIGNA	TURE:			••••••••••••••••••••••••••••••••••••••																			
HWA CONTACT:	<u></u>			PHONE:	· · · · · · · · · · · · · · · · · · ·																		
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HVVA SAMPLE ID	DATE	TIME	MATRIX	LAB ID	BOTTLE				<u> </u>													REMARKS	,
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HWA GEOSCIENCES INC. 19730 64<sup>th</sup> Avenue West, Suite 200 Lynnwood, WA 98036 Tel: 425-774-0106 / Fax: 425-774-2714 / E-Mail: hwa@hongwest.com

# FIELD SAMPLING DATA SHEET

Project Name:	······································
Project Number:	
Project Location:	
Client/Contact:	

### Well Number: Sample Number: \_\_\_\_\_ Weather:

Date: \_\_\_\_\_

· . . .

#### WELL MONITORING:

					and a second	and the second	
 Time	Well Depth	Depth to Water	Measuring Point (TOC?)	Measuring Point Elevation	Water Level Elevation	Gallons in Well (Pore Volume)	$(2^{\circ} \text{ case} = 0.163 \text{ gal/ft})$ $(4^{\circ} \text{ case} = 0.653 \text{ gal/ft})$
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#### WELL PURGING:

Time	Method	Gallons	Pore Volumes	pH	Conductivity	Temperature	ły	
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#### WELL SAMPLING:

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Time	Sampling Method	Sample Analysis	Container Number	Container Volume	Container Type	Field Filtered (Y/N)	Preservative	Iced (Y/N)
							•	
<u></u>								
<u></u>								

(Include equipment used: Bailers, Filters, Well Probe, pH/Conductivity Meter, etc.) COMMENTS/NOTES:

Total # of Bottles: \_\_\_\_\_ Sampler: \_\_\_\_\_ Signature: \_\_\_\_\_

.

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_ Analysis: Alkalinity, Bicarbonate

Sample \_\_\_\_\_

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_ Analysis: Chloride, Sulfate, Nitrate

Sample

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_ Analysis: Calcium, Iron, Magnesium, Manganese, Sodium

Sample \_\_\_\_\_

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_\_ Analysis: TOC, Ammonia

Sample \_\_\_\_\_

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_\_ Analysis: TDS

Sample \_\_\_\_\_

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_ Analysis: Alkalinity, Bicarbonate

Sample \_\_\_\_\_

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_ Analysis: Chloride, Sulfate, Nitrate

Sample \_\_\_\_

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_ Analysis: Calcium, Iron, Magnesium, Manganese, Sodium

Sample \_\_\_\_\_

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_\_ Analysis: TOC, Ammonia

Sample \_\_\_\_\_

C

Anderson Pit LPL Sampler \_\_\_\_ Date/Time \_\_\_\_\_ Analysis: TDS

Sample \_\_\_\_\_

### Appendix D – Salvage/Recycling Plan

The exact location of the salvage/recycling area will be determined by the need at that time and will be moved as conditions change. It will; however, remain within the approved LPL area.

#### Sorting:

- Material will be sorted by machinery and/or hand into appropriate commodity bins or piles
- Commodities that require further sorting will be loaded for transport to permitted recycling or material recovery facilities
- Material that is not salvageable/recyclable will be deposited in the LPL
- A log will be kept of inbound and outbound commodities

#### **Distribution:**

- Wood will be ground into hogfuel and hauled for use at a cogeneration plant
- Mixed metal will be stockpiled and shipped either directly to a buyer or to a permitted facility for further recycling
- Concrete will be stockpiled and crushed for resale
- Asphaltic materials will be stockpiled and shipped for resale

Material storage piles will be regulated under the LPL permit in accordance with WAC 173-350-400 and managed in alignment with the requirements of WAC 173-350-320, Piles Used for Storage or Treatment. Piles will be no greater than 250 cubic yards ("yd<sup>3</sup>") per material type.

Each calendar year, DTG will remove at least 50% of the sum of the volume of each commodity pile present at the start of the calendar year and of the volume of material pulled for salvage/recycling during the calendar year, i.e. if the calendar year starts with 250 yd<sup>3</sup> of a commodity and DTG pulls an additional 250 yd<sup>3</sup> of that commodity during the calendar year, at least 250 yd<sup>3</sup> [0.5 x (250 + 250) = 250] of material will be removed by the end of the calendar year.

If a need is encountered which will require greater onsite pile sizes, DTG will request approval from the YHD. The request will include the reason for the need and the estimated temporary pile size and duration associated with the increase.

Piles will reside within the permitted LPL footprint. Piles will not exceed 20 feet in height and will maintain a minimum 20-foot roadway between and around pile types. Piles management will be subject to review as requested by the YHD and Yakima County Fire Marshal.

Export of material piles will be reported annually as part of the Annual Report.

Appendix E – Sample Log Forms

RUCK		PPODICT
ПСТОЖЕВ		SEARCH
OSTOWER I		SLANCH
RDER	् CASH CUSTOMER - IB	PRODUCT ID 142
RODUCT		DESCRIPTION BRUSH/UNLD CY
		YARD 01
ORDER INFO		PRODUCT ID 143
		VADD 01
TICKET INFO		
EIGHT	IBS	VARD 01
		PRODUCT ID 145
		DESCRIPTION LIME CY
		YARD 01
		PRODUCT ID 146
		DESCRIPTION LIME / UNLD
		YARD 01
		PRODUCT ID 147
		DESCRIPTION CERTIFIED WEIGH TICKETS
		YARD 01
		PRODUCT ID 148
		DESCRIPTION DEMO CY
		YARD 01
		PRODUCT ID 149
		DESCRIPTION DEMO / UNLD CY
		YARD 01
		PRODUCT ID 150
		DESCRIPTION ASPHALI CY
		VADD 01
		PRODUCT ID 154
SAVE		DESCRIPTION PCS (Petroleum Contaminated Soil) \$20/Ton
SAVE		Manna Maria Containinateu Soll) \$50/101
DS TODAY: 12 NEXT TICKET 511028		SCALE 1

RUCK	Q.		LAST LOAD
	q		SEARCH
RDFR			TRUCK
PODUCT			RC389
			BD10
ORDER INFO		d d	BM444
TICKET INFO			JA1
			RC394
/EIGHT			RC384
L			BD08
			CASHYAK
			MA-582
			RC391
			VA7
			RC390
			SL8
			C51
			DTGAR
			GPIISUZU
			RC354
			SORACCO
			C52/T11
			M20
			M44
PRIME			

8624 219th St. S.E. • Woodinville, WA 98072 Phone: (425) 549-3000 ap@dtgrecycle.com 51240
 Name
Phone
Commodity
Truck NoYard
Weigh In-
Weigh Out-
Time-
Date-
Χ
County

.

\*



41 ROCKY TOP RD YAKIMA, WA 98908 \* PO BOX 14203 MILL CREEK, WA 98082 \* (509) 965-3621 \*

www.dtgrecycle.com

# YAKIMA / ANDERSON FACILITY DAILY LOG

(\*\*) Describes action that was taken to remedy incident or complaint

DATE	OCCURANCE
	· · · · · · · · · · · · · · · · · · ·
· ·	

\*\*weather; customer/neighbor complaints; rejected loads; litter pick-up activities; non-customer visitors (inspectors, sub-contractors, tours, etc.)



# DTG Yakima – Limited Purpose Landfill

41 Rocky op Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

### Waste Inspection/Discovery Record

Date:	
Time:	
Inspector:	

Delivery By: Vehicle Description and License: Volume of Waste Load Delivered: Type of Waste: Commercial Direct Hauler Name of Business: Location: Private Individual Description: Questioned Materials: (Reject or hold for testing at deliverer's expense) Identified Unacceptable: Disposition: Reloaded to Deliverer's Vehicle Discovered-Deliverer Notified

Discovered-Deliverer Unknown

Site Manager Notification:		
Time:	Date:	Form Copy:
Notification: Yakima Hea	alth District	
Time:	Date:	Form Copy:
Person Notified	:	
Washington	n State Department of Ecology	
Time:	Date:	Form Copy:
Person Notified:	:	



# DTG Yakima – Limited Purpose Landfill

41 Rocky op Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

## **Complaint Record Form**

**Complaint** Name of Person Filing Report: Date: Address: Phone Number:

Name of Person Receiving Complaint:

Description of Complaint:

Location of Issue:

**Requested Action:** 

**Complaint Resolution** 

Person Responding: Date of Response: Response Action Taken:

Date of Notification to Complainant: Phone Number: Letter:

Complaint Satisfied?

Or

Submittal to Conflict Resolution Process?



Date:\_\_\_\_\_ Inspector:\_\_\_\_\_ Initials: \_\_\_\_\_

DTG Yakima - Limited Purpose Landfill

41 Rocky Top Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

**Facility Inspection Checklist** 

As required By WAC 173-350-400

	Observations and Actions			
Monitoring Description	Satisfactory	Unsatisfactory	Corrections/Notes	
General Site Facilities				
Entrance and sign in good condition?				
Entrance access route well maintained?				
Access road graded and dust controlled?				
Litter controlled?				
Acceptable noise levels on equipment?				
Two personnel on site?				
Certified Landfill Operator on site?				
Fire protection on hand?				
First aid available on site?				
Office and radio communications operational?				
On-site personnel wearing required safety protection	n?			
Onerations Plan current and available				
At the end of the day, entrance gate closed and lock	cho'			
At the end of the day, entrance gate closed and lock	eu:			
Active Landfill Working Face				
Operator at working face?				
Safe public access provided?				
Communications system working?				
Litter fences in place at working face?				
Daily cover being placed?				
Daily cover available?				
Cover soil borrow area well maintained?				
Surface water run-on being diverted?				
Stormwater Control				
Culverts or structures free of obstructions?				
Ditches and cover free of erosion?				
Stormwater evaporation ponds water levels satisfac	tory?			
Temporary diversion berms in place?				
Significant storm event inspection? (following event	:)			
Groundwater Monitoring				
Well protection in-place?				
Well casings locked?				
Final Cover				
Surface water run-off controlled?				
Surface water run-on controlled?				
Cover free of ponded water?				
Cover soil free of erosion				
Vegetation maintained?				
Odors controlled?				
Vectors controlled?				



Date:\_\_\_\_\_ Inspector:\_\_\_\_\_ Initials:\_\_\_\_\_

DTG Yakima

41 Rocky Top Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

#### Facility Inspection Checklist

Additional Notes Sheet

Item Description	Notes	

# Equipment Safety Inspection & Repair Report

Company		Date	
Location		Shift	
Job #	Job Name _		
Equipment #	Туре		
Hour Meter	Mileage		
N/A = NOT APPLICABLE	OK = NO REPAIRS NEEDED	RR = REQUIRES REPAIR	
Fluids	Outside	Inside Cab	
NA OK RR Visible Leaks Oil Level/Pressure Coolant Level (check only when	NA OK RR Lights Steps/Hand Rails Tires/Tracks	NA   OK   RR     Image: Service   Image: Service     Image: Service   I	
equipment is COLD)  Hydraulic Oil Level  Transmission Fluid	Exhaust     Fenders	Fire Extinguisher     Gauges	
Fuel Level         Engine Compartment          Battery Cable              Battery Cable              Hoses	Bucket         Bucket         Cutting Edge/Teeth         Hoses         Fittings Greased         Hitch/Coupler         Wipers	Image: Sector of the sector	
Explanation of Defects		- -	
		1	
Repairs or adjustments needed Repairs or adjustments NOT needed for safe equipment operation			
Operator's Signature			
Repairs or adjustments if needed COMPLETED by			
Mechanics's Signature		Date	

Equipment Safety Inspection & Repair Report

#### III. Plan of Operation – WAC 173-350-210(6)(a)

The Plan of Operation provides information on operation and maintenance procedures for the Facility's MRF operation. The MRF operation will be integrated into the LPL operation resulting in much of this content being consistent with the LPL permit. The Plan of Operation presents technical guidance and regulatory requirements to ensure effective operations under both normal and emergency conditions.

This Plan of Operation is intended to present the standard methods and procedures of the MRF operation in adequate detail to demonstrate compliance with the regulatory requirements of WAC 173-350-040 and WAC 173-350-210. The Plan of Operation also provides supporting documentation for facility permitting.

#### A. Location and Description

The Facility is in a rural area northwest of the City of Yakima. A Facility vicinity map (Drawing 1) and site plan (Drawing 2), along with other figures, are included in Appendix A. DTG subsidiary East Mountain Investments LLC ("EMI" or "Landlord") owns the land. DTG leases the land from EMI, owns the equipment, and operates the Facility. The Facility has a permitted LPL waste disposal footprint of approximately 125 acres on which the MRF mobile sorting station will operate. This remote location provides security and reduces impacts on the surrounding community.

There are private residences and orchards to the north and northeast of the facility. The area to the southwest, west, south, and southeast is vacant arid land.

#### B. General Operations

This section describes general operations of the MRF, including operating hours and access control.

#### 1. Operating Hours

The Facility is permitted to operate Monday through Saturday from 6:00 a.m. to 6:00 p.m. Normal operating hours for waste disposal are Monday through Friday from 7:00 a.m. to 5:00 p.m., except for the following holidays:

- New Year's Day (January 1)
- Memorial Day (last Monday in May)
- Independence Day (July 4)
- Labor Day (first Monday in September)
- Thanksgiving Day (fourth Thursday in November)
- Christmas Day (December 25)

The MRF operation will take place during permitted operating hours.

#### 2. Types of Solid Waste Handled – WAC 173-350-210(6)(a)(i)

This section describes the types of solid waste that may be handled at the MRF. The MRF operation will only process material types that are approved as acceptable recyclable materials by the YHD.

The following list are the acceptable recyclable materials for MRF processing.

- Cured concrete
- Asphaltic pavement
- Metal
- Construction, demolition, and land-clearing debris
- Wood waste

The MRF will process these acceptable recyclable materials to recover the following recyclable materials.

- Metal
- Concrete
- Asphaltic pavement
- Wood

DTG may request to expand the acceptable recyclable material and recyclable material types based on market drivers. The lists may be revised through a written request to YHD.

#### 3. Waste Acceptance – WAC 173-350-210(6)(a)(ii)

This section describes the criteria and procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the MRF. The MRF will only handle material that has been accepted through the waste inspection and acceptance process. The waste inspection and acceptance process is described below.

#### a. Waste Inspection and Acceptance

Incoming waste must be inspected to prevent unacceptable waste from entering the LPL and MRF. Waste delivered to the Facility will be inspected, quantified, and recorded in the LPL Digital Volume Log which includes the electronic invoices for each customer. Loads designated for the MRF will be identified as such in the log and additionally maintained in a MRF Digital Volume Log. The log is maintained in the computer located in the scale office.

The waste inspection program includes the set of waste acceptance criteria listed below. DTG will not accept any waste destined for the LPL or MRF that does not comply with the control criteria. These criteria include at least the following major components:

- Inquiry by the scale attendant
- Visual check of loads by scale attendant
- Random waste inspections at unloading point
- Reference to list of acceptable materials and recording previously rejected materials by source.

All generating sources of questionable solid wastes are advised of waste and MRF acceptance criteria and asked to pre-qualify their waste and employ management procedures that conform to operating requirements and permit conditions. Information is supplied to customers describing acceptable and restricted wastes. Training in waste characterization and designation will be provided on request.

Facility employees will be trained to recognize non-permitted waste to avoid its improper disposal in the LPL and handling by the MRF. Each employee will be provided with waste screening information and then tested on acceptable materials. All operations personnel are informed of the implications to DTG and themselves of accepting nonconforming wastes.

Routine inquiry and visual inspection will be performed by the scale attendant prior to loads being directed to the MRF. The operator at the MRF will randomly inspect loads, as loads are delivered. Each load will be visually inspected, both in the truck before tipping and after the waste is on the tipping area. Because of the frequency with which loads come to the Facility, there is enough time to inspect at the tipping floor without interfering with other operational activities.

After inspection, any prohibited waste observed will be returned to the customer for proper disposal elsewhere. If prohibited waste is found after the customer has left the site, the customer will be called and required to return to the site to pick up the prohibited waste. Personnel operating the Facility reserve the right to reject loads. Instead of contacting the customer to have the customer remove the prohibited waste, DTG may decide to dispose of the prohibited waste at an appropriate disposal facility. If DTG disposes of the prohibited waste, the prohibited waste will be disposed of at an appropriate facility.

Inspections resulting in the identification of prohibited waste are to be recorded, including vehicle (or license) number, the refused waste, and the method by which the situation was resolved, and all records are to be placed in the MRF Daily Operations Log.

If waste is initially directed to the MRF and through inspection determined to be inconsistent with the source separated acceptable recyclable materials requirements for sorting, the load will be redirected to the LPL for disposal following the LPL screening process.

If non-permitted waste is found to have been disposed of in the LPL, YHD will be notified immediately.

#### 4. Waste Handling – WAC 173-350-210(6)(a)(iii)

This section describes how solid wastes are to be handled on-site, including recycling or recovery, storage, maximum site capacity, method of adding or removing waste materials from the facility, and equipment used. A typical MRF operational layout for the MRF Active Location and MRF Dedicated Location options are shown on Drawing 3 in Appendix A.

#### a. Recycling or Recovery

Material received at the MRF suitable for recycling will be separated and recycled to the extent possible. Material will be sorted by machinery, and/or hand, into appropriate recyclable material containers or piles. The MRF area will be determined as needed and will be moved as conditions change, but it will be within the approved LPL limit of waste.

An initial bulk sort will be performed from the waste pile. Large, heavy, and bulky items will be removed with an excavator and placed to the side of the tipping area in piles or containers in accordance with material type.

After the initial bulk sort from the stockpile, all remaining materials are transferred from the stockpile onto the sorting station feeder with an excavator. The mobile sorting station will be

an MGL PPS 4-Bay manufactured by MGL Engineering, or similar. Mobile sorting station product information is in Appendix C. The station will have a conveyor to transport material along an elevated sort line staffed by MRF personnel. Recyclable materials will be hand-sorted and deposited directly into roll-off containers positioned at grade below the sort line. Sorted material containers will be transported to an appropriate area for further material processing (grinding, baling, etc.) or transferred to piles or larger containers for consolidation and export offsite. Additional handling of recycled materials will be as follows.

**Metal** - Metal will be placed into containers for transport offsite.

**Concrete** - Aggregate will be crushed for resale/reuse and transported offsite.

**Asphaltic Pavement** – Asphaltic pavement will be crushed for resale/reuse as recycled asphalt pavement (RAP) and transported offsite.

**Wood** - Wood from the wood stockpile will be loaded into the grinder with a wheel loader and ground into hog fuel. The hog fuel will be conveyed to the ground and pushed into the hog fuel stockpile. The hog fuel will be loaded into trailers for transportation to companies that consume it for energy.

Residual material not recycled along the sort line will be deposited into containers by the conveyor at the back end of the mobile sorting station, where the material will be reviewed for acceptability in the LPL. Residuals from source separated C&D that are on the acceptable materials list for the LPL are not classified as municipal solid waste ("MSW") and may be disposed of in the LPL. Equipment will remove the residual material containers and dispose of the material into the active area of the LPL.

If residuals are determined to be an unacceptable waste type for disposal in the LPL, the unacceptable residuals will be loaded into a container for appropriate disposal elsewhere.

DTG will keep a log of inbound and outbound recyclable materials and unacceptable materials in the MRF Digital Volume Log.

#### b. Storage and Capacity

Material storage piles will be regulated in alignment with the requirements of WAC 173-350-320, Piles Used for Storage or Treatment. Piles will be no greater than 250 cubic yards ("yd<sup>3</sup>").

Each calendar year, DTG will remove at least 50% of the sum of the volume of each recyclable material pile present at the start of the calendar year and of the volume of material pulled for recycling during the calendar year, i.e. if the calendar year starts with 250 yd<sup>3</sup> of a recyclable material and DTG pulls an additional 250 yd<sup>3</sup> of that recyclable material during the calendar year, at least 250 yd<sup>3</sup> [0.5 x (250 + 250) = 250] of material will be removed by the end of the calendar year.

If a need is encountered which will require greater onsite pile sizes, DTG will request approval from the YHD. The request will include the reason for the need and the estimated temporary pile size and duration associated with the increase.

Piles will reside within the permitted LPL footprint. Piles will not exceed 20 feet in height and will maintain a minimum 20-foot roadway between and around pile types. Piles management will be subject to review as requested by the YHD and Yakima County Fire Marshal.

Recyclable materials separated through the mobile sorting station will be deposited into rolloff containers. Recyclable materials susceptible to negative impacts from exposure to weather will be stored in covered containers. Full containers will be regularly switched out with empty containers using a wheel loader or roll-off truck. Depending on the recyclable material, filled containers may be temporarily stored onsite for offsite export, or containers may be emptied into the material storage piles. Storage areas will remain outside of active excavation areas.

#### c. Adding or Removing Materials from the MRF

Acceptable recyclable materials are accepted from commercial and public customers. The main entrance to the Facility is from the scale office following Rocky Top Road west through a gate and then to the MRF location. The Facility exit follows the reverse route back to the scale office. MRF customers will be directed from the scale office to self-haul their materials to the MRF location and then return to the scale office after dumping their loads at the MRF as directed by the MRF operator.

Incoming MRF waste and export of recyclable materials will be documented in the MRF Digital Volume Log and reported annually as part of the MRF Annual Report. The MRF report will be submitted annually in accordance with Section III.C. Additionally, the MRF data will be included in the LPL Annual Report.

#### d. Equipment

Table 1 lists the on-site equipment currently used for landfill operations and owned by DTG which will also be part of the MRF operation. Table 2 also includes anticipated MRF equipment.

Table 2. Equipment List			
Equipment	Make/Model (if known)	Quantity	
Dozer	2013 Caterpillar D8T	1	
Excavator	2019 Caterpillar 320	1	
Haul truck	2014 Caterpillar 740	1	
Wheel loader	2018 Caterpillar 980	1	
Tipper	2020 Columbia Series	1	
Water truck	Peterbilt	1	
MGL PPS 4-Bay mobile	MGL Engineering	1	
sorting station (anticipated)			

If equipment on site requires maintenance, DTG management or their designees will be notified so maintenance activities can begin immediately. Equipment will undergo preventive maintenance as recommended by the equipment manufacturer.

#### 5. Facility Controls – WAC 173-350-210(6)(a)(iv)

This section describes facility controls to be employed at the MRF. These controls are consistent with the LPL permit as the MRF operation will reside within the LPL footprint.

#### a. Control Litter, Dust, and Nuisance Odors – WAC 173-350-210(6)(a)(iv)(A)

Consistent with Section II.C.4, litter control at the MRF operation will consist of perimeter fencing of the area, if not within the litter control fencing associated with the active LPL area; favorable orientation of the mobile sorting station to reduce wind impacts; storage of sorted, wind susceptible recyclables in containers (recyclable materials with low wind susceptibility may be stored in piles); and regular disposal of acceptable residuals into the LPL. Residuals will be direct conveyed into containers.

The tipping area will also include an adjacent ecology block supported fence to contain litter.

The MRF operation will include litter control inspections of the site performed once per week and after high wind events to determine if litter cleanup is necessary. Cleanup will be scheduled based on the results of the inspections. Results of inspections and litter cleanup efforts are noted in the MRF Daily Operations Log, recorded on the MRF Inspection Checklist.

Consistent with Section II.C.9, fugitive dust will be controlled at the site by watering roadways and cover soil. Note that watering will be limited to surface material only. This minimal amount of water will not infiltrate significantly into the LPL. Rather, the water will be stored in the pore space of the surface soil and evaporated. Excessive watering could contribute to leachate production.

Consistent with Section II.C.9, odors are generally controlled through the material types accepted at the LPL and the MRF. Materials are generally non-putrescible and typically do not generate significant odor. Odors are also controlled through the regular and timely placement of residual waste into the landfill without prolonged exposure to the surrounding environment and the use of cover soil. Additional cover soil at the LPL will be used to control odors as necessary.

#### b. Vector Control – WAC 173-350-210(6)(a)(iv)(B)

Consistent with Section II.C.3, the types of waste that are accepted at the LPL and the MRF are not likely to become putrescible and thus will not attract vectors as a food source. The LPL controls vectors through certain passive methods used to ensure vectors do not nest in the waste. These methods include daily inspections of the working face and MRF, compaction of the waste, and cover soil placement. If necessary, MRF residuals removal and cover material over the LPL waste can be placed at more frequent intervals if vector harborage becomes a nuisance.

#### c. On-Site Attendant – WAC 173-350-210(6)(a)(iv)(C)

Regulations require that attendant(s) are provided onsite during hours of operation. Attendant(s) will be onsite during normal operating hours (7:00 a.m. to 5:00 p.m.) for waste recycling and disposal. During additional permitted operating hours 6:00 a.m. to 7:00 a.m. and 5:00 p.m. to 6:00 p.m. materials may be transferred and staged for pick-up without an attendant onsite, if other controls approved by the YHD are in place.

At least two attendants will be on-site during Facility hours of operation in accordance with the LPL permit. Currently, the Facility is staffed by four employees. At least one DTG employee manages the active face of the LPL and field responsibilities, and one DTG employee manages the scale office. The other employees support LPL fill and MRF

operations. DTG will have a Certified Landfill Operator on site at all times the landfill is open to the public. Other DTG personnel are available from other Facility operations as needed. Operator certification will be per the WAC 173-300 requirements.

No customers will be allowed to enter the MRF area to unload waste unless the landfill and MRF are open and the required staff are on-site.

The MRF operation will include additional staff onsite during hours of operation.

### d. Signage – WAC 173-350-210(6)(a)(iv)(D)

A sign is posted at the Facility entrance off of Summitview Road providing the facility name.

#### e. Emergency Response – WAC 173-350-210(6)(a)(iv)(E)

This section presents procedures for the immediate summoning of fire, police, or emergency service personnel in the event of an emergency. The plan is consistent with the permitted LPL.

LPL and MRF operations staff will have personal communication devices (telephones, radios, etc.) while on site. The primary means of communication between LPL and MRF operations staff will be push-to-talk radios. The scale attendant within the scale office will be the primary resource for off-site communications by telephone. In the event of an emergency, all actions will be coordinated with the Site Manager to ensure protection of customers, workers, the Facility, and the environment.

In the event of an emergency:

- The incident will be immediately reported to Site Manager, Brooks Franklin, at (425) 354-0154, who will report the incident to emergency service personnel by calling 911.
- LPL and MRF operations staff are not precluded from calling 911 directly.
- Site Manager, Brooks Franklin, will report the incident to DTG Safety and Environmental Advisor, Paul Jerome, at (425) 903-0317.
- The DTG Safety and Environmental Department will report the incident no later than 8:30 a.m. the following business day to Ecology at (509) 575-2490 and YHD at (509) 575-4040.

#### f. Leachate Management – WAC 173-350-210(6)(a)(iv)(F)

Regulations require the removal or otherwise management of leachate from containment structure(s) to prevent soil and/or groundwater contamination. Consistent with Section II.C.7, the MRF operation will be within the permitted LPL area with run-on and runoff controls consistent with the LPL permit. Runoff of stormwater that has come, or potentially come, in contact with waste is leachate and will be directed away from the active LPL area and MRF operation through ditches and other conveyance to be retained onsite at a localized, temporary pond area or directed to the LPL evaporation ponds, shown on the site plan in Appendix A, preventing offsite discharge. Collected runoff will be allowed to evaporate or infiltrate which is consistent with the LPL operation that was shown to be protective of human health and the environment through the demonstration provided in Section II.C.5.

Potential run-on into the developed and unclosed areas of the LPL and the operations area for the MRF will be intercepted and directed to the natural seasonal drainageways to prevent contamination.

### g. Tipping Floor Waste Removal – WAC 173-350-210(6)(a)(iv)(G)

Regulations require the removal of waste materials from the tipping floor at a frequency approved by the YHD. Removal of waste materials and disposal in the LPL will be at a regular frequency consistent with the LPL permit, including LPL cover soil requirements.

Residual waste will be reviewed for acceptability in the LPL. Residuals from source separated C&D that are on the acceptable materials list for the LPL are not classified as MSW and may be disposed of in the LPL. Equipment will remove the residual material containers and dispose of the material into the active area of the LPL.

If residuals are determined to be an unacceptable waste type for disposal in the LPL, the unacceptable residuals will be loaded into a container for appropriate disposal elsewhere.

### h. Prevent Aircraft Safety Hazards – WAC 173-350-210(6)(a)(iv)(H)

Regulations require that the handling of waste capable of attracting birds does not pose an aircraft safety hazard. The types of waste that are accepted at the LPL are not likely to become putrescible and thus will not attract vectors, such as birds, as a food source. Vectors will be managed, in accordance with Section III.B.5.b.

In addition, the nearest airport is the Yakima Air Terminal (McAllister Field), located approximately 6.5 miles (34,300 feet) southeast of the site and 3 miles south of downtown Yakima.

#### 6. Inspection and Maintenance – WAC 173-350-210(6)(a)(v)

This section includes a description of how operators will inspect and maintain the MRF to prevent malfunctions, deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or a threat to human health, including the inspection form operators will use. Inspections must be conducted as needed, but at least weekly, unless an alternate schedule is approved by the YHD as part of the permitting process.

The MRF inspection and maintenance will be performed independent of the broader LPL inspection and maintenance activities. At a minimum, MRF inspections will be performed weekly. The MRF inspection form is included in Appendix F.

General MRF inspections will be conducted each day before beginning MRF operations. These inspections include, but are not limited to:

- Condition of the all-weather surfacing of the MRF area
- Condition and stability of the mobile sorting station
- Available capacity of in-place receiving containers

Staff will record results of the weekly MRF inspection in the MRF Daily Operations Log. In addition, staff will notify a DTG supervisor or designee of necessary maintenance or repairs so they can be scheduled. Maintenance and repairs will be accomplished no later than 30

days after the inspection, as weather conditions permit. Once the maintenance and repairs are complete, these activities will be outlined and described in the MRF Daily Operations Log.

In addition to the regular inspection and maintenance, the mobile sorting station operation and maintenance (O&M) manual will be used to train staff, prevent malfunctions and operator errors, and schedule regular equipment maintenance.

#### 7. Record Keeping – WAC 173-350-210(6)(a)(vi)

This section includes a description of how operators will maintain operating records on the amounts (weight or volume) and types of waste received and removed from the Facility, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Facility inspection reports must be maintained in the operating at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the Plan of Operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the YHD.

DTG will maintain operating records on the amounts (weight and volume) and types of waste received and removed from the MRF. Several forms of documentation are required to be maintained in the operating record, each of which is outlined below. Copies of the following forms are presented in Appendix F, many of which are the same or similar forms used for the LPL.

### a. MRF Digital Volume Log

The MRF Digital Volume Log includes the electronic invoices for each customer/vehicle. The log is maintained in the computer located in the scale office. The log records vehicle type, customer identification, material type and volume. Volumes are determined by use of a tape measure. This information is entered by the scale attendant each time a vehicle brings waste to the site and is used for billing purposes and to keep track of the cumulative volumes processed by the MRF and the total number of vehicles/transactions.

DTG will log exported recyclable materials from the Facility using the same MRF Digital Volume Log. The export log will record material type, quantity (weight or volume), and destination. The difference in import and export quantities for the MRF will be residual waste for disposal, documented in the LPL Digital Volume Log.

DTG will also log outbound MRF residuals that are inappropriate for LPL disposal using the same MRF Digital Volume Log. The residual export log will record quantity (weight or volume) and destination.

#### b. MRF Daily Operations Log

MRF daily operations records will be documented in the MRF Daily Operations Log. The MRF Daily Operations Log will include times of operator arrival and departure, weather conditions, site inspections of the MRF, waste inspections that resulted in identification of unacceptable waste, decisions made during the day, and significant deviations from this Plan of Operation. The MRF Daily Operations Log will also include any forms or reports that document special occurrences at the MRF. Examples would be fire inspection reports and maintenance

records. The MRF Daily Operations Log will also include the volume of recyclable materials that are hauled off-site to an appropriate recycling facility and the volume of non-LPL residuals exported to an appropriate facility for disposal. Receiving facilities will be identified. The MRF Daily Operations Log will be kept in the office and must be retained for a minimum of 5 years.

MRF inspections will record the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action.

#### c. Annual Report

The information required for the MRF Annual Report will be developed in accordance with Section III.C, be included in the LPL Annual Report, and maintained in the operating record. The MRF Annual Report will be separate from the LPL Annual Report.

#### 8. Safety and Emergency Plan – WAC 173-350-210(6)(a)(vii)

This section presents the safety and emergency plan for the LPL which will contain the MRF operation, including procedures for fire protection. The plan is consistent with the permitted LPL. Additionally, Sheet 5 of 5 in Appendix A shows the location of site safety features.

#### a. Fire Protection

Adequate soil will be stockpiled in an area near the active working face and be readily accessible in case of a fire. The LPL will be visually inspected every operating day for evidence of fire or smoke, including, but not specifically limited to visible emissions, settlement, or other evidence of combustion.

If at any time evidence of a fire is observed, the procedures will be followed as outlined below:

- The incident will be immediately reported to Site Manager, Brooks Franklin, at (425) 354-0154, who will report the incident to DTG Safety and Environmental Advisor, Paul Jerome, at (425) 903-0317.
- Soil only will be used to extinguish the fire. Water application is prohibited because of potential leachate generation.
- Soil will be applied using the onsite landfill equipment and other available mining equipment.
- The DTG Safety and Environmental Department will report the incident no later than 8:30 a.m. the following business day to Ecology at (509) 575-2490 and YHD at (509) 575-4040.
- DTG will increase the inspection schedule to 7 days per week until a period of at least 45 continuous and uninterrupted days has passed in which no visible emissions, or other evidence of combustion, are observed at any time, unless otherwise approved by the YHD.

For each visible emission, or other evidence of combustion, DTG will document the following after inspecting the LPL:

- Date and time of initial observation
- Duration of event
- Remedial and corrective actions taken
- Effectiveness of remedial and corrective actions
- Name, title, and signature of the inspector

DTG will submit all such records to Ecology and YHD within 5 working days of the initial observation and file a copy in the Daily Operations Log.

#### b. Communications

LPL operations staff will have personal communication devices (telephones, radios, etc.) while on site. The primary means of communication between LPL and MRF operations staff will be push-to-talk radios. The scale attendant within the scale office will be the primary resource for off-site communications by telephone. In the event of an emergency, all actions will be coordinated with the Site Manager to ensure protection of customers, workers, the Facility, and the environment.

#### c. Explosive Gases

The response to the detection of explosive landfill gas will be in accordance with the LPL permit.

#### d. Emergency Action Plan

An Emergency Action Plan has been developed for the LPL and is included in Appendix G.

#### C. Annual Report – WAC 173-350-210(6)(b)

DTG will prepare and submit an MRF Annual Report to YHD and Ecology by April 1 immediately following the reporting year. The MRF Annual Report will be specific to the MRF operation and include recycling or material recovery activities during the previous calendar year submitted on forms provided by Ecology. The MRF Annual Report will include:

- Name and address of the recycling or material recovery operation
- Calendar year covered by the report
- Annual quantities and types of waste received, recovered or recycled, and disposed, in tons
- Destination of material

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Appendix A – Figures

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FIRE	EXTINGUISHER

- FIRST AID KIT
- EMERGENCY SPILL KIT
- AUTOMATED EXTERNAL DEFIBRILLATOR
- EYE WASH STATION

<b>521 N. 20TH</b> YAKIMA, WASH (509) 5	AVE., SUITE 3 INGTON 98902 75-6990		
TG ENTERPRISES INC.	DRAWN BY: T.K.L.		
	DATE: 11/14/2019		
41 ROCKY TOP ROAD,	JOB NO. <b>19277</b>		
AKIMA WASHINGTON 98908 PARCEL NO. 171310-23003			
174KGEE 1KG. 171010 20000			
NAME: SITE SAFETY	J OF J		

**Appendix C – Product Information** 

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MGL PPS 4-BAY

#### GENERAL SPECIFICATIONS

OPTIONS

Transport Length: 65' 1" Transport Width: 12' Transport Height 10' 2" Transport Height (Low Boy): 13' 6" Working Length: 65' 1" Working Width: 12' Working Height (min/max): 10'2'/13' Weight (lbs.): 28,000 Engine: Perkins 403F-11 (25HP)
#### F – MRF Forms

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## Equipment Safety Inspection & Repair Report

Company		Date
Location		Shift
Job #	Job Name _	
Equipment #	Туре	
Hour Meter	Mileage	
N/A = NOT APPLICABLE	OK = NO REPAIRS NEEDED	RR = REQUIRES REPAIR
Fluids	Outside	Inside Cab
NA OK RR Visible Leaks Oil Level/Pressure Coolant Level (check only when	NA OK RR Lights Steps/Hand Rails Tires/Tracks	NA   OK   RR     Image: Service   Image: Service     Image: Service   I
equipment is COLD)  Hydraulic Oil Level  Transmission Fluid	Exhaust     Fenders	Fire Extinguisher     Gauges
Fuel Level         Engine Compartment            Battery Cable           Fan Belt           Hoses           Air Filter           Guards	Bucket         Bucket         Cutting Edge/Teeth         Hoses         Fittings Greased         Hitch/Coupler         Wipers	Horn         Hydraulic Controls         Glass (all sides)         Roll Over Protection         Seat Belt/Seat         Steering
Explanation of Defects		- -
		1
Repairs or adjustments needed	]Repairs or adjustments NOT needed for s	safe equipment operation
Operator's Signature		
Repairs or adjustments if needed	COMPLETED by	
Mechanics's Signature		Date

Equipment Safety Inspection & Repair Report



#### DTG Yakima - Material Recovery Facility

41 Rocky Top Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

Daily Operations Log

#### As required By WAC 173-350-210

	Occurance
Date	(**) Describes action that was taken to remedy incident or complaint



#### DTG Yakima - Material Recovery Facility

41 Rocky Top Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

Daily Operations Log

#### As required By WAC 173-350-210

	Occurance
Date	(**) Describes action that was taken to remedy incident or complaint



Date:\_\_\_\_\_ Inspector:\_\_\_\_\_ Initials:\_\_\_\_\_

#### DTG Yakima - Material Recovery Facility

41 Rocky Top Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

#### MRF Inspection Checklist

As required By WAC 173-350-210

	Observations and Actions			
Monitoring Description	Satisfactory	Unsatisfactory	Corrections/Notes	
General MRF Facilities				
Operations area graded and dust control?				
Operations area all-weather surfacing in good				
condition?				
Litter controlled?				
Mobile sorting station in good condition,				
including fall prevention?				
Mobile sorting station level without signs of				
instability?				
Receiving containers in good condition and				
positioned correctly?				
Tipping area managed effectively?				
Residual pile managed effectively?				
Storage piles and containers managed				
effectively?				
Acceptable noise levels on equipment?				
Fire protection on hand?				
First aid available?				
Eye wash stations accessible?				
Spill kit stocked and accessible?				
Office and radio communications operational?				
On-site personnel wearing required safety				
protection?				
Public access restrictions in place?				
Surface water run-on being diverted?				
Plan of Operation current and available?				
	Ac	ditional Notes		
Item Description	Notes			



#### DTG Yakima – Material Recovery Facility

41 Rocky op Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

#### Waste Inspection/Discovery Record

Date:
Time:
Inspector:

Delivery By: Vehicle Description and License: Volume of Waste Load Delivered: Type of Waste: Commercial Direct Hauler Name of Business: Location: Private Individual Description: Questioned Materials: (Reject or hold for testing at deliverer's expense) Identified Unacceptable: Disposition: Reloaded to Deliverer's Vehicle

- Discovered-Deliverer Notified
- Discovered-Deliverer Unknown

Site Manager N	lotification:		
Tim	e:	Date:	Form Copy:
Notification:	Yakima Health Distr	ict	
Tim	e:	Date:	Form Copy:
Pers	son Notified:		
	Washington State D	Pepartment of Ecology	
Time	e:	Date:	Form Copy:
Pers	son Notified:		

RUCK		PPODICT
UCTOMED		SEARCH
OSTOWER I		SLANCH
RDER	् CASH CUSTOMER - IB	PRODUCT ID 142
RODUCT		DESCRIPTION BRUSH/UNLD CY
		YARD 01
ORDER INFO		PRODUCT ID 143
		VADD 01
TICKET INFO		
EIGHT	IBS	VARD 01
		PRODUCT ID 145
		DESCRIPTION LIME CY
		YARD 01
		PRODUCT ID 146
		DESCRIPTION LIME / UNLD
		YARD 01
		PRODUCT ID 147
		DESCRIPTION CERTIFIED WEIGH TICKETS
		YARD 01
		PRODUCT ID 148
		DESCRIPTION DEMO CY
		YARD 01
		PRODUCT ID 149
		DESCRIPTION DEMO / UNLD CY
		YARD 01
		PRODUCT ID 150
		DESCRIPTION ASPHALI CY
		VADD 01
		PRODUCT ID 154
SAVE		DESCRIPTION PCS (Petroleum Contaminated Soil) \$20/Ton
SAVE		Manna Maria Containinateu Soll) \$50/101
DS TODAY: 12 NEXT TICKET 511028		SCALE 1

RUCK	Q.		LAST LOAD
	q		SEARCH
RDFR			TRUCK
PODUCT			RC389
			BD10
ORDER INFO		d d	BM444
TICKET INFO			JA1
			RC394
/EIGHT			RC384
L			BD08
			CASHYAK
			MA-582
			RC391
			VA7
			RC390
			SL8
			C51
			DTGAR
			GPIISUZU
			RC354
			SORACCO
			C52/T11
			M20
			M44
PRIME			

8624 219th St. S.E. • Woodinville, WA 98072 Phone: (425) 549-3000 ap@dtgrecycle.com 51240
 Name
Phone
Commodity
Truck NoYard
Weigh In-
Weigh Out-
Time-
Date-
Χ
County

.

\*

## Equipment Safety Inspection & Repair Report

Company		Date
Location		Shift
Job #	Job Name _	
Equipment #	Туре	
Hour Meter	Mileage	
N/A = NOT APPLICABLE	OK = NO REPAIRS NEEDED	RR = REQUIRES REPAIR
Fluids	Outside	Inside Cab
NA OK RR Visible Leaks Oil Level/Pressure Coolant Level (check only when	NA OK RR Lights Steps/Hand Rails Tires/Tracks	NA   OK   RR     Image: Service   Image: Service     Image: Service   I
equipment is COLD)  Hydraulic Oil Level  Transmission Fluid	Exhaust     Fenders	Fire Extinguisher     Gauges
Fuel Level         Engine Compartment            Battery Cable           Fan Belt           Hoses           Air Filter           Guards	Bucket         Bucket         Cutting Edge/Teeth         Hoses         Fittings Greased         Hitch/Coupler         Wipers	Horn         Hydraulic Controls         Glass (all sides)         Roll Over Protection         Seat Belt/Seat         Steering
Explanation of Defects		- -
		1
Repairs or adjustments needed	]Repairs or adjustments NOT needed for s	safe equipment operation
Operator's Signature		
Repairs or adjustments if needed	COMPLETED by	
Mechanics's Signature		Date

Equipment Safety Inspection & Repair Report



Date:\_\_\_\_\_ Inspector:\_\_\_\_\_ Initials:\_\_\_\_\_

#### DTG Yakima - Material Recovery Facility

41 Rocky Top Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

#### MRF Inspection Checklist

As required By WAC 173-350-210

	Observations and Actions			
Monitoring Description	Satisfactory	Unsatisfactory	Corrections/Notes	
General MRF Facilities				
Operations area graded and dust control?				
Operations area all-weather surfacing in good				
condition?				
Litter controlled?				
Mobile sorting station in good condition,				
including fall prevention?				
Mobile sorting station level without signs of				
instability?				
Receiving containers in good condition and				
positioned correctly?				
Tipping area managed effectively?				
Residual pile managed effectively?				
Storage piles and containers managed				
effectively?				
Acceptable noise levels on equipment?				
Fire protection on hand?				
First aid available?				
Eye wash stations accessible?				
Spill kit stocked and accessible?				
Office and radio communications operational?				
On-site personnel wearing required safety				
protection?				
Public access restrictions in place?				
Surface water run-on being diverted?				
Plan of Operation current and available?				
	Ac	ditional Notes		
Item Description	Notes			

RUCK		PPODICT
UCTOMED		SEARCH
OSTOWER I		SLANCH
RDER	् CASH CUSTOMER - IB	PRODUCT ID 142
RODUCT		DESCRIPTION BRUSH/UNLD CY
		YARD 01
ORDER INFO		PRODUCT ID 143
		VADD 01
TICKET INFO		
EIGHT	IBS	VARD 01
		PRODUCT ID 145
		DESCRIPTION LIME CY
		YARD 01
		PRODUCT ID 146
		DESCRIPTION LIME / UNLD
		YARD 01
		PRODUCT ID 147
		DESCRIPTION CERTIFIED WEIGH TICKETS
		YARD 01
		PRODUCT ID 148
		DESCRIPTION DEMO CY
		YARD 01
		PRODUCT ID 149
		DESCRIPTION DEMO / UNLD CY
		YARD 01
		PRODUCT ID 150
		DESCRIPTION ASPHALI CY
		VADD 01
		PRODUCT ID 154
SAVE		DESCRIPTION PCS (Petroleum Contaminated Soil) \$20/Ton
SAVE		Manna Maria Containinateu Soll) \$50/101
DS TODAY: 12 NEXT TICKET 511028		SCALE 1

RUCK	Q		LAST LOAD
USTOMER			SEARCH
RDFR	E C		TRUCK
PODUCT	ŌĒ		RC389
			BD10
ORDER INFO		l d	BM444
TICKET INFO			JA1
			RC394
/EIGHT			RC384
L			BD08
			CASHYAK
			MA-582
			RC391
			VA7
			RC390
			SL8
			C51
			DTGAR
			GPIISUZU
			RC354
			SORACCO
			C52/T11
			M20
			M44
PRIME			

8624 219th St. S.E. • Woodinville, WA 98072 Phone: (425) 549-3000 ap@dtgrecycle.com 51240
 Name
Phone
Commodity
Truck NoYard
Weigh In-
Weigh Out-
Time-
Date-
Χ
County:

.

\*



#### DTG Yakima – Material Recovery Facility

41 Rocky op Road, Yakima, WA 98908 \* PO BOX 14203 Mill Creek, WA 98082 \* (509) 965-3621

#### Waste Inspection/Discovery Record

Date:
Time:
Inspector:

Delivery By: Vehicle Description and License: Volume of Waste Load Delivered: Type of Waste: Commercial Direct Hauler Name of Business: Location: Private Individual Description: Questioned Materials: (Reject or hold for testing at deliverer's expense) Identified Unacceptable: Disposition: Reloaded to Deliverer's Vehicle

- Discovered-Deliverer Notified
- Discovered-Deliverer Unknown

Site Manager N	lotification:			
Time	e:	Date:	Form Copy:	
Notification:	Yakima Health Distr	ict		
Time	e:	Date:	Form Copy:	
Pers	on Notified:			
Washington State Department of Ecology				
Time	e:	Date:	Form Copy:	
Pers	on Notified:			

#### Appendix G – Emergency Action Plan

#### INTRODUCTION

The purpose of this plan is to ensure the health, safety, and welfare of employees at DTG and to reduce the adverse impact of possible emergencies on property and the community. This plan is adopted in accordance with Occupational Safety Standard 29 CFR 1910.38, WAC 296-24 and other applicable law.

An emergency situation is any situation in which there is injury, loss of life; significant property damage or emergency services are needed, including medical treatment, rescue, fire, and hazardous substance control and mitigation. This plan establishes programs of response to: Fire, earthquake, flooding, medical emergency, violent criminal threat, bomb threat, gas leak/power outage and environmental contamination.

#### PROGRAM ADMINISTRATOR

The Site Manager is the Program Administrator.

The Program Administrator is responsible for:

- 1. Implementation of this Emergency Action Plan.
- 2. Employee training with respect to this Emergency Action Plan.
- 3. Ongoing compliance with this Emergency Action Plan.

All DTG employees must be familiar with and comply with this Emergency Action Plan. Failure to comply with this Plan may lead to disciplinary action, including suspension or termination of employment.

#### EMERGENCY COORDINATOR

The Site Manager is the <u>Emergency Coordinator</u> in charge of DTG response to every emergency. The Emergency Coordinator must ensure appropriate measures are taken in the event of an emergency, notify appropriate authorities of the emergency, conduct all follow-up investigations and complete all necessary reports.

#### EMERGENCY EQUIPMENT

- Emergency Action Plan
- Personal Protective Equipment
- Fire Suppression Equipment
- Eyewash Station
- Fully Stocked First Aid Kit (Office)
- Safety Data Sheets
- Hazardous Spill Kit

#### EMPLOYEE TRAINING

All employees will be trained about the contents of this Emergency Action Plan when they are initially hired, on an annual basis and whenever this Emergency Action Plan is materially revised.

Mock emergency response drills will be performed on a periodic basis.

A copy of this Emergency Action Plan will be maintained in the site office, available to employees at all times.

#### PERIODIC PLAN REVIEW

On an annual basis the Program Administrator will review this Emergency Action Plan and make any modifications or additions as may be necessary at such time.

#### COMMUNICATION/ALARM SYSTEM

Should a perceived emergency situation arise, the following four steps are to be followed in response:

- 1. Whoever observes an emergency ("Reporting Party") must immediately **call 911** if the situation involves a medical emergency or a threat of medical emergency. If a phone is not accessible, the Reporting Party will contact the scale office by radio and the scale attendant will call 911.
- 2. The Reporting Party must inform the Emergency Coordinator by phone or by face to face contact.
- 3. The Emergency Coordinator will assess the situation, and based upon that determination, consult with internal company resources and/or call for outside assistance, including 911 emergency response if applicable.
- 4. The Emergency Coordinator will inform employees and visitors of the emergency situation as needed to protect human health and the environment.

#### **EVACUATION PROCEDURES**

Employees will be notified by the Emergency Coordinator if evacuation of the facility is necessary. Should an evacuation of the premises be necessary, employees shall do the following:

- 1. Proceed to the nearest exit, notifying others as you go. Leave your personal belongings and company property as is. DO NOT WASTE TIME BY COLLECTING THESE ITEMS. Your safety is most important at this time.
- 2. Emergency escape routes are posted throughout the Facility and in scale office. A copy of the Emergency Escape Routes is included as **Attachment C**.
- 3. Proceed in a CALM AND ORDERLY fashion to the primary assembly area. If the primary assembly area is not a safe distance from the hazard, you will be informed to proceed to the secondary assembly area. The primary assembly area for DTG Recycle Yakima is the main driveway entrance.
- 4. Assist disabled persons to the nearest exit and/or assembly area.

- 5. The Emergency Coordinator is responsible for ensuring that all personnel have evacuated the premises and are present in their designated assembly area.
- 6. The Emergency Coordinator will take roll call to account for all employees and visitors. Any unaccounted-for persons will be reported to emergency response professionals.
- 7. No person may re-enter the area or building until instructed to do so by the Emergency Coordinator. No person may leave the assembly area until instructed to do so by the Emergency Coordinator.

#### FIRE RESPONSE

- 1. **Call 911** if the fire cannot easily be put out with a fire extinguisher or dirt.
- 2. Activate the fire alarm system, or communication process, to alert every one of the fire.
- 3. Inform the Emergency Coordinator of the following:
  - a. Type of fire.
  - b. Location of fire.
  - c. Extent and size of fire.
  - d. Injuries.
  - e. Action taken, if any
- 4. Use the fire extinguisher, water, or loader to put out small (waste basket size) fires, IF SAFE TO DO SO and if you have been trained to use the equipment. Never put your personal safety at risk.
- 5. Evacuate the building or area of the fire (if necessary) in accordance with Evacuation Procedures.
- 6. The Emergency Coordinator will meet the responding fire engine and direct them to the fire.
- 7. The Emergency Coordinator will complete all necessary reports and notifications to proper authorities and company personnel.
- 8. If clothing catches fire, STOP, DROP, AND ROLL. Stop where you are, drop to the floor, and roll over and over to smother the flames.

#### MEDICAL EMERGENCY RESPONSE

The overall responsibility for medical assistance and rescue is that of the outside emergency response agencies, such as the fire department. **Attachment A** lists the emergency response agencies that may be needed.

Persons trained and certified in first aid/cardiopulmonary resuscitation ("CPR") may assist injured employees as long as these duties can be performed safely without personal risk to self or others. **Attachment B** lists personnel trained in basic first aid and CPR, if any.

- 1. Immediately notify the Emergency Coordinator.
- 2. Provide the following information:
  - a. Type of emergency.
  - b. Location of victim.
  - c. Extent of injuries or illness.
  - d. Number of injured/ill persons.
  - e. Actions taken, if any.

- 3. Locate first aid kit and administer first aid, if necessary (first aid and CPR to be administered by certified personnel only).
- 4. If outside medical assistance is needed, call 911.
- Serious injuries or illness such as head or spinal injuries, broken bones, serious burns, excessive bleeding, or chest pains require immediate emergency medical assistance -ALWAYS CALL 911.
  - a. A designated person will wait outside to meet and direct paramedics, ambulance, etc., to the location of the injured or ill person.
  - b. If the person has been exposed to a hazardous material, obtain a copy of the Material Safety Data Sheet ("MSDS") for the emergency provider.
  - c. Check employee's file for emergency contact name and phone number for Emergency Coordinator to notify of emergency situation.
- 6. Emergency Coordinator will complete all required reports and notifications to proper authorities, company personnel, or family member.
- 7. Non-serious injuries or illnesses (headache, cold, itching, nausea, etc.) may require the employee to be transported to the clinic or hospital for additional treatment.
  - a. The Emergency Coordinator will contact the clinic or hospital and inform them of the nature of the injury, or illness, and the number of employees being transported.
- 8. Nonwork-related injuries/illnesses should be referred to the employee's own personal physician for treatment.
- 9. Never leave the injured, or ill, person alone.

#### EARTHQUAKE RESPONSE

#### During the Earthquake

- 1. Remain calm.
- 2. Take cover **beside** a desk or table. Protect your head and neck.
- 3. Stay away from windows and objects which could fall on you.
- 4. Stay where you are DO NOT RUN OUTSIDE. Falling debris may cause injury.
- 5. If outdoors, stay in an open area DO NOT ENTER A BUILDING.

#### After the Earthquake

- 1. Be prepared for aftershocks.
- 2. Check for injuries.
- 3. Administer first aid to injured parties if you are trained and willing to do so. Do not move them unless they are in immediate danger of further injury.
- 4. Stay put unless instructed to leave area by Emergency Coordinator.
- 5. DO NOT USE matches, electrical switches, or electrical appliances, in case of gas leaks.
- 6. The Emergency Coordinator will check for gas leaks, fires, broken water mains, etc.
- 7. The Emergency Coordinator will assess building for damage.

- 8. If necessary, or directed to do so by the Emergency Coordinator, evacuate the building. Be aware of structure damage that may exist and assist both the physically impaired and injured.
- 9. Turn a battery-operated radio, or phone, on to monitor the emergency situation, or condition of surrounding areas.

#### NATURAL GAS LEAK/POWER-OUTAGE RESPONSE

- 1. Notify Emergency Coordinator immediately.
- 2. If a gas leak exists, open all doors and windows.
- 3. If directed to do so by the Emergency Coordinator, evacuate the building in accordance with Evacuation Procedures. The Emergency Coordinator will take roll call to account for all personnel.
- 4. The Emergency Coordinator will attempt to determine cause or problem, call for emergency assistance from fire department, Gas Company, electric company, or other necessary source.
- 5. If a gas leak, DO NOT LIGHT MATCHES, LIGHTERS, USE ELECTRICAL APPLIANCES, OR ELECTRICAL SWITCHES.

#### FLOODING RESPONSE

- 1. Notify the Emergency Coordinator. The Emergency Coordinator will assess extent of damage and determine further actions to be taken.
- 2. The Emergency Coordinator will turn off all electrical equipment, and ensure that all electrical power has been de-energized in flooded area.
- 3. If necessary, evacuate the building in accordance with Evacuation Procedures.

#### VIOLENT/CRIMINAL BEHAVIOR

- 1. Be alert to suspicious situations, or persons, and report them immediately to your supervisor. If you notice a suspicious situation, or person, loitering around, immediately notify the Site Manager.
- 2. If you are the victim, or are involved in any violent or criminal act, as soon as possible, notify the police and report the incident. Inform your immediate supervisor.
- 3. If you witness a violent or criminal act, immediately notify the police and report the act. DO NOT GET INVOLVED.
- 4. DO NOT TAKE ANY UNNECESSARY CHANCES. REMAIN CALM AT ALL TIMES.

#### BOMB THREAT RESPONSE

- 1. Any person receiving a phone call that a bomb, or other explosive device, has been placed on the premises is to ask the caller the following questions:
  - a. When is the bomb going to explode?
  - b. Where is the bomb right now?
  - c. What does the bomb look like?
  - d. What kind of bomb is it?
  - e. What will cause the bomb to explode?
  - f. Why was the bomb placed?
  - g. What is your name, address, phone number, etc.?

- 2. Write down the answers to the above questions.
- 3. Call 911.
- 4. Notify the Emergency Coordinator.
- 5. If the bomb threat is received by mail, do not further handle the letter, envelope, package, etc., notify the Emergency Coordinator immediately.
- 6. If requested by the Emergency Coordinator, evacuate in accordance with Evacuation Procedures.

#### HAZARDOUS SUBSTANCE EXPOSURE RESPONSE

- 1. Notify the Emergency Coordinator.
- 2. In case of chemical inhalation:
  - a. Remove the victim from the area into fresh air.
  - b. **Call 911** if outside assistance is required.
  - c. Provide CPR if the employee stops breathing (CPR to be administered by certified personnel only).
  - d. Obtain copy of MSDS for medical provider.
- 3. In case of eye contact with chemical
  - a. Review copy of MSDS sheet for proper eye washing instructions and follow instructions. Note that most chemicals are treated by flushing with water, but that in some cases, water is not recommended. PAY ATTENTION TO THE MSDS.
  - b. Locate eye wash, shower, or fountain.
  - c. If advised, rinse the eye with cold water for a minimum of 15 minutes.
  - d. **Call 911,** or transport to clinic or hospital, if necessary.
  - e. Obtain copy of MSDS for medical provider.
- 4. In case of skin contact with chemical
  - a. Review copy of MSDS sheet for proper instructions and follow instructions. Note that most chemicals are treated by flushing with water, but that in some cases, water is not recommended. PAY ATTENTION TO THE MSDS.
  - b. Flush the skin with cold water for a minimum of 15 minutes.
  - c. Remove contaminated clothing.
  - d. Follow additional instructions on MSDS.
  - e. **Call 911,** or transport to clinic or hospital if necessary.
- 5. In case of ingestion of hazardous material
  - a. Review copy of MSDS for instructions.
  - b. Contact Poison Control Center for emergency procedures.
  - c. **Call 911**, or transport to clinic or hospital if necessary.

<u>REMEMBER</u>: TO ALWAYS CHECK MSDS FOR THE NECESSARY FIRST AID OR MEDICAL TREATMENT INSTRUCTIONS. PROVIDE COPY OF MSDS TO MEDICAL PROVIDER.

#### HAZARDOUS SUBSTANCES SPILL and REMOVAL RESPONSE

- 1. Notify the Emergency Coordinator immediately.
- 2. Identify source of spill.
- 3. Cover or dike around spilled material to prevent from getting into stormwater or sewer drains using materials in the spill kit, or other available materials.

- 4. Absorb spilled material. The absorbing material must be compatible with the spilled material. Apply absorbent from the outer edge of the spill to the center. Use a shovel for longer reach.
- 5. Consult with Site Manager for further direction on cleanup and disposal. Site Manager, in consultation with staff or outside environmental experts, will direct all clean-up, disposal (through a Hazardous Waste Vendor) and governmental reporting activity in compliance with applicable laws and regulations.

#### ASBESTOS

DTG Recycle – Yakima: Asbestos Information and Response Program is included as **Attachment D**.

#### \*\*\*\*\*\*

#### ATTACHMENTS TO THE EMERGENCY ACTION PLAN

- Emergency Action Plan Quiz
- Attachment A: Emergency Contact Numbers
- Attachment B: First Aid/CPR Trained Personnel
- Attachment C Emergency Evacuation Routes
- Attachment D: DTG Recycle Yakima: Asbestos Information and Response Program

#### **EMERGENCY ACTION PLAN QUIZ**

- 1. Who is the Emergency Coordinator?
- 2. Who do you notify if an emergency arises while you are at work?
- 3. What is the first thing you would do if you noticed a fire?
- 4. What are the Evacuation Procedures?
- 5. What do you do if your clothing catches fire?
- 6. What do you do if a co-worker is injured by equipment while working?
- 7. What do you do if you witness a violent or criminal act?
- 8. In the event of a chemical exposure what is one thing that you should do regardless of the type of exposure (inhalation, skin, and eye)?
- 9. Where should you go when you evacuate the building?
- 10. What do you do in an earthquake?

#### ATTACHMENT A:

#### **EMERGENCY CONTACT NUMBERS**

Name/Agency	Telephone Number
Site Manager – Brooks Franklin	425-354-0154
Safety and Environmental Advisor – Paul Jerome	425-903-0317
Emergency Notification Numbers:	
Ambulance/Police/Fire	911
Non-Emergency Fire	509-575-6060
Non-Emergency Police	509-575-6200
Insurance Company — Darrin Mroz	619-938-2536
Public Health — Yakima Health District	509-575-4040
National Response Center	800-424-8802
Occupational Safety & Health Administration (OSHA)	800-321-6742 24 hrs.
State Emergency Response Commission: Division of Emergency Management Spill Response Center	800-258-5990
Washington Dept. of Ecology	509-575-2490
Yakima Regional Clean Air Agency	509-834-2050
Washington Utilities & Transportation Commission	800-562-6150
Washington Poison Center (WAPC)	800-222-1222

#### ATTACHMENT B:

#### FIRST AID/CPR TRAINED PERSONNEL

Brooks Franklin Wendy McConnell Darryl Melton Jarod Stone Beatrice Sybouts Leonard Cloutier Jesus de Santo Derek Evans

#### ATTACHMENT C:

#### **EMERGENCY EVACUATION ROUTES**

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#### ATTACHMENT D:

#### ASBESTOS INFORMATION AND EMERGENCY RESPONSE PROGRAM

#### 1. ASBESTOS BACKGROUND

Asbestos is a group of naturally occurring minerals. Asbestos was used in a variety of building materials because of the fiber's unique properties. Asbestos fibers have high tensile strength and do not rot. These fibers are chemically inert and acid- and heat-resistant, which makes them a good insulating material component. Most airborne asbestos fibers are very small and **cannot be seen by the naked eye**. Approximately two million fibers could rest on the head of a pin. It is these properties which make asbestos fibers a health hazard if inhaled into the lung. Regulations were created in the 1970s requiring asbestos to be removed from buildings prior to renovation or demolition. The regulations require that asbestos materials be removed using wet methods, and that asbestos waste is kept wet until it arrives at an approved disposal facility.

A <u>friable material</u> is a material that can be reduced to a powder by hand pressure. Friable asbestos materials may release fibers into the air if disturbed. If asbestos fibers become airborne, they remain in the air for a long time before settling out. Asbestos occurring in friable material are particularly dangerous.

#### 2. ASBESTOS IN BUILDING MATERIALS

Asbestos has been used in over 3,000 building products. Suspect Asbestos Containing Materials (SACM) include the following when manufactured prior to 1980:

Cement Pipes	Elevator Brake Shoes
Cement Wallboard	HVAC Duct Insulation
Cement Siding	Boiler Insulation
Asphalt Floor Tile	Breeching Insulation
Vinyl Floor Tile (typically 9x9)	Ductwork Flexible Fabric Connections
Vinyl Sheet Flooring	Cooling Towers
Flooring Backing	Pipe Insulation (corrugated air-cell, block, etc.)
Construction Mastics	Heating and Electrical Ducts
Acoustical Plaster	Electrical Panel Partitions
Decorative Plaster	Electrical Cloth
Textured Paints and Coatings	Electric Wiring Insulation
Ceiling Tiles and Lay-in Panels	Chalkboards
Spray Applied Insulation	Roofing Shingles
Blown-in Insulation	Roofing Felt
Fireproofing Materials	Base Flashing
Taping Compounds (thermal)	Thermal Paper Products
Packing Material (for wall and floor penetrations)	Fire Doors
High Temperature Gaskets	Caulking/Putties
Laboratory Hoods/Tabletops	Adhesives

Laboratory Gloves	Wallboard
Fire Blankets	Joint Compounds
Fire Curtains	Vinyl Wall Coverings
Elevator Equipment Panels	Spackling Compounds

#### 3. ASBESTOS RESPONSE AT DTG Recycle – Yakima

In the event SACM arrive, proceed as follows:

- 1. If the SACM is still within its delivery vehicle, advise the driver that the load contains SACM. If the driver has documentation that the load is clean, retain a copy of the documentation in our files and ask DTG's Safety and Environmental Advisor to review and approve the load before it is tipped. If the driver does not have documentation, enter information about the unacceptable load in our computer system; give the driver a copy of the Transfer Stations for Unacceptable Materials information sheet. <u>Observe the vehicle until it exits the DTG Recycle Yakima facility</u>.
- 2. If the material is not within its delivery vehicle, immediately notify the Site Manager and Safety and Environmental Advisor about the SACM. All subsequent DTG Recycle Yakima operations regarding the SACM will be directed by the Safety and Environmental Advisor.
- 3. Do not disturb or handle SACM. DO NOT push with equipment.
- 4. Quarantine off area with Hazard tape.
- 5. Keep all persons upwind; if unable to keep up wind you must evacuate area.
- 6. Contact hauler to find who is generator of material, or directly contact generator if known.
- 7. Verify with generator if material was tested for asbestos content. Request good faith survey and lab test results.
- 8. Document chain of events.
- 9. If materials are verified **not to** contain asbestos with lab test data continue operations, if materials are verified to contain asbestos, keep area quarantined off.
- 10. If materials contain 1% by volume or greater of asbestos, the materials will be required to be abated by a certified contractor. Generally, the generator is required to initiate the abatement process. DTG Recycle Yakima **employees are not certified to abate asbestos.**
- 11. The Site Manager will consult with contracted environmental experts and notify regulator agency(ies) as required by applicable law.
- 12. If generator does not immediately start the abatement process, DTG Recycle Yakima will take the lead and arrange for a certified asbestos abatement contractor to remove the asbestos containing material and invoice the hauler/generator for all costs incurred.

## Appendix E

DTG Recycle – Yakima PCS Treatment Facility, Operations Plan

# DTG Recycle – Yakima Petroleum Contaminated Soil Treatment Facility Operations Plan



v1.0 – June 2020

Facility Address: 41 Rocky Top Road Yakima, WA. 98908 This Page Intentionally Left Blank
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# List of Abbreviations

Anderson	Anderson Rock & Demolition Pits
CPR	cardiopulmonary resuscitation
DTG	DTG Enterprises, Inc.
Ecology	Washington State Department of Ecology
EMI or Landlord	East Mountain Investments LLC
LPL	limited purpose landfill
MTCA	Model Toxics Control Act
PCS	petroleum contaminated soil
WAC	Washington Administrative Code
YHD	Yakima Health District
YPD	Yakima County Planning Division

# **OPERATIONS PLAN**

# WAC 173-350-320(6)

Applicant:

DTG Enterprises, Inc.

Facility Type: Petroleum Contaminated Soil Treatment Facility

41 Rocky Top Road Yakima, WA 98908

Facility Location:

**Applicant Contact:** 

Mike Sheldon DTG Enterprises, Inc. PO Box 14203 Mill Creek, WA 98082

(425) 549-3000 mike@dtgrecycle.com This Page Intentionally Left Blank

#### I. Introduction

In November 2019, DTG Enterprises, Inc. ("DTG") purchased Anderson Rock & Demolition Pits ("Anderson") at 41 Rocky Top Road, Yakima, WA 98908 (the "Facility"). Existing, permitted operations at the Facility include a surface mine, a petroleum contaminated soil ("PCS") treatment facility, and a limited purpose landfill ("LPL"). DTG will continue these operations at the Facility.

DTG drafted this Operations Plan to provide information on operations and maintenance procedures for the Facility's PCS treatment operations. The Operations Plan presents technical guidance and regulatory requirements to ensure effective operations under both normal and emergency conditions.

This Operations Plan is intended to present the standard methods and procedures of the PCS operation in adequate detail to demonstrate compliance with the regulatory requirements of Washington Administrative Code ("WAC") 173-350-040 and WAC 173-350-320. The Operations Plan also provides supporting documentation for facility permitting.

#### II. Location and Description

The Facility is in a rural area northwest of the City of Yakima. Appendix A shows the Site Plan, prepared in 2015 for Anderson. DTG subsidiary East Mountain Investments LLC ("EMI" or "Landlord") owns the land. DTG leases the land from EMI, and owns the equipment, and operates the Facility. The PCS facility is approximately 7 acres. This remote location provides security and reduces impacts on the surrounding community.

There are private residences and orchards to the north and northeast of the facility. The area to the southwest, west, south, and southeast is vacant arid land.

#### III. General Operations

This section describes general operations for PCS treatment, including operating hours and access control.

#### A. Operating Hours

The Facility is permitted to operate Monday through Saturday from 6:00 a.m. to 6:00 p.m. Normal operating hours for waste disposal are Monday through Friday from 7:00 a.m. to 5:00 p.m., except for the following holidays:

- New Year's Day (January 1)
- Memorial Day (last Monday in May)
- Independence Day (July 4)
- Labor Day (first Monday in September)
- Thanksgiving Day (fourth Thursday in November)
- Christmas Day (December 25)

Operating hours may be temporarily extended beyond the 6:00 a.m. to 6:00 p.m. time frame. Any such extension of operating hours will require demonstration of the special need and coordination and approval from the Yakima County Planning Division ("YPD") with notification to the Yakima Health District ("YHD").

# IV. Types of Solid Waste Handled – WAC 173-350-320(6)(a)(i)

This section describes the types of solid waste to be handled by the PCS treatment operation. Only petroleum contaminated soils (soils with gasoline, diesel or waste oil contamination) will be accepted for treatment at the Facility PCS operation.

All other waste types are prohibited and will be handled as described in Sections V. This includes, but is not limited to, material without a letter from the YHD approving treatment at the Facility.

# V. Waste Acceptance – WAC 173-350-320(6)(a)(ii)

This section describes the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the Facility PCS operation. Each batch of PCS to be treated at the Facility must include a letter of approval from YHD stating that the material is approved for treatment at the Facility ("Approval Letter"). The Approval Letter includes:

- Financially responsible party
- YHD job name
- Type(s) of contamination
- Level(s) of contamination
- Approved plan of action

No soils with contamination, other than petroleum, above Model Toxics Control Act ("MTCA") Method A limits will be accepted for treatment. The Facility will not accept any loads of PCS without an Approval Letter from YHD.

# VI. Waste Handling – WAC 173-350-320(6)(a)(iii)

This section describes how waste materials are to be handled on-site, including recycling or recovery, storage, maximum site capacity, methods of adding or removing waste materials from the Facility and equipment used, and how DTG will ensure adequate dumping capacity at all times.

The Facility PCS operation can treat approximately 7,000 cubic yards ("yd<sup>3</sup>") of soil at one time. The annual volume depends on how long it takes to remediate each plot. A reasonable estimate is 11,000 yd<sup>3</sup> per year. The remediation is done mostly through aeration with a small amount of bioremediation.

Approved PCS will be dumped by the hauler at the PCS remediation site. It is spread in a plot with a backhoe or front loader to an appropriate depth between 6"-18". The depth depends on volume and severity of contaminants.

After approval for release by YHD, the remediated soil will be moved to the Facility LPL and used as daily cover or intermediate cover. No released PCS will be used for final cover of the LPL.

# VII. Environmental Controls – WAC 173-350-320(6)(a)(iv)

This section describes environmental controls to be employed at the Facility, including preventing, litter, dust, vectors, access to the piles, and attraction of birds that could pose an aircraft safety hazard.

# A. Litter and Dust Control

Uncontrolled litter can harbor vectors, create a potential fire hazard, become an aesthetic nuisance, and adversely affect wildlife and its habitat. Litter control inspections of the site will be performed once per week and after high wind events to determine if litter cleanup is necessary. Cleanup will be scheduled based on the results of the inspections.

Fugitive dust will be controlled at the site by watering roadways. Note that watering will be limited to surface material only. This minimal amount of water will not infiltrate significantly. Rather, the water will be stored in the pore space of the surface soil and evaporated. Excessive watering could contribute to leachate production.

# B. Disease Vector Control

The types of PCS that are accepted at the Facility will not attract vectors as a food source.

# C. Access Control

Regulatory requirements dictate that public access must be controlled, and unauthorized traffic must be prevented at the piles at all times. To accomplish this, gates preventing vehicular access are locked during hours when the facility is not in operation. There is one access road to the site, and it is in plain view of the office so the attendant can monitor the traffic traveling toward the facility. A chip seal road provides access from the office to the PCS treatment site. The chip seal road will be maintained as needed to facilitate PCS treatment operation and access and to ensure PCS treatment safety and functionality.

No customers will be allowed to enter the pile area to unload material unless the PCS treatment facility is open and the required staff are on-site.

# D. Aircraft Safety

The PCS accepted at the Facility is not likely to attract birds.

#### VIII. Inspection and Maintenance – WAC 173-350-320(6)(a)(v)

This section includes a description of how DTG will inspect and maintain the Facility to prevent malfunctions, deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or a threat to human health.

The area will be inspected at a minimum of once per week. These inspections include, but are not limited to:

- Onsite access roads to determine if maintenance is necessary to ensure safe travel by customers and operations vehicles
- Evidence of vandalism
- Evidence of trespassers
- Surface water controls condition
- Piles condition

The PCS area is inspected for cross contamination between piles, perimeter berm integrity, run-on and runoff controls, litter, stake markings, and map referencing and accuracy.

Staff will record results of the inspection on the PCS Site Weekly Inspection form. In addition, staff will notify a DTG supervisor of necessary maintenance or repairs so they can be scheduled. All maintenance and repairs will be accomplished no later than 30 days after the inspection, as weather conditions permit. Once the maintenance and repairs are complete, these activities will be outlined and described in the PCS Site Weekly Inspection form. A sample form has been included in Appendix C.

# IX. Record Keeping – WAC 173-350-320(6)(a)(vi)

This section includes a description of how DTG will maintain operating records on the amounts (weight and volume) and the types of waste received and removed from the Facility. This section also addresses inspection reports and annual reports.

Records of all approved PCS material is kept in hard form on-site in the scale office. After the individual pile has been approved for release, the records for that pile are kept for a minimum of seven (7) years.

Several forms of documentation are required to be maintained for the PCS operation, each of which is outlined below. Copies of the following forms are presented in Appendix C.

# A. Digital Tonnage Log and Supporting Documentation

The Digital Tonnage Log includes the electronic invoices for each customer/vehicle. The log is maintained in the computer located in the scale office. The log records vehicle type, customer identification, material type and tonnage. Tonnage is determined through the use of the vehicle scale. This information is entered by the scale attendant each time a vehicle brings waste to the site and is used for billing purposes and to keep track of the cumulative tonnages processed at the PCS treatment facility and the total number of vehicles/transactions. An image of the invoicing software and a hand ticket have been included in Appendix C. Hand tickets are used when the software is unavailable.

As discussed in Section V, material is not accepted without an Approval Letter from YHD. Additional required documentation is the PCS Questionnaire to gather information about the PCS, hauler and payee. An example Approval Letter and other forms have been included in Appendix C.

Accepted PCS is logged in the PCS To Be Remediated spreadsheet to track active PCS piles onsite, including mapped location. A blank spreadsheet and an example spreadsheet with map have been included in Appendix C.

# **B.** Inspection Reports

The PCS Site Weekly Inspection forms are completed at least weekly as discussed in Section VIII. The inspections record date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the Operations Plan is also noted on the forms.

An Equipment Safety Inspection and Repair Report is also used when equipment is inspected at the PCS site. Both forms have been included in Appendix C.

# C. Material Release Documentation

The PCS piles are sampled and analyzed by an approved and certified laboratory on a periodic basis in accordance with Section XI. Once material is below contaminant threshold, the test results of the remediated piles are submitted to the YHD with a request for release approval. If treated soil is approved for release by YHD, YHD will provide a release approval letter. Once received the treated material is removed from the PCS area and disposed of at the LPL. The final placement of the treated material is recorded in the LPL Daily Operations Log. Sample forms have been included in Appendix C.

# D. Annual Report

The Annual Report will be developed in accordance with Section XIII and be maintained in the operating record.

# X. Safety and Emergency Plan – WAC 173-350-320(6)(a)(vii)

This section presents the safety and emergency plan for the PCS operation. See Appendix B for the Facility Emergency Action Plan.

# XI. Contaminated Soil – WAC 173-350-320(6)(a)(ix)

This section presents the waste characterization, record keeping, description of acceptable contaminants and concentrations, sampling plan, and forms used in the PCS operation.

# A. Waste Characterization

The Facility will not accept any loads of PCS without an Approval Letter from YHD. Piles are not removed without a release approval letter from YHD.

# B. Operating Records

For all piles, the PCS To Be Remediated spreadsheet records the assigned pile number, release site description, contaminant and concentration level, the approval date, and the tons received. Treated soil approved for release by YHD are used as daily cover or intermediate cover at the LPL on site.

# C. Contaminants and Concentrations Accepted

Only as approved by YHD with an Approval Letter. No soils with contamination, other than petroleum, above Model Toxics Control Act ("MTCA") Method A limits will be accepted for treatment.

# D. Sampling and Analysis

Piles are tested for characterized contaminants based on the contaminate levels and time on site. Samples are taken according to Table 1 below.

Table 1. Typical Number of Samples Needed to Adequately Characterize Stockpiled Soil <sup>1</sup>				
Yd <sup>3</sup> of Soil	Number of Samples for Chemical Analysis			
0-100	3			
101 – 500	5			
501 – 1000	7			
1001 - 2000	10			
>2000	10 + 1 for each additional 500 yd <sup>3</sup>			
<sup>1</sup> Source: 1995 Ecology Guidance for Remediation of Petroleum Contaminated Soil				

The sampling and testing is conducted by an approved and certified laboratory. If contamination levels are below the MTCA Method A threshold, DTG submits a letter to the YHD containing the test results of the remediated pile for release approval.

#### E. Forms

As discussed in Section IX, forms used to record accepted PCS include the release site description, contaminant and concentration level, the approval date, the receiving date, the tons received, and the source county. Treated soil approved for release by YHD are used as daily cover or intermediate cover at the LPL on site. Sample forms are included in Appendix C.

#### XII. Treatment Process – WAC 173-350-320(6)(a)(x)

This section includes a description of the process used to treat contaminated soils, reducing contaminants and harmful characteristics. Each approved batch will be stockpiled individually to prevent cross contamination, with approximately 5' between plots. Piles are numbered and mapped for reference. After an approved batch has been received, DTG marks the pile with a labelled stake. The label contains the:

- Pile number
- YHD approval name
- YHD approval date

Piles are aerated as needed. Additional moisture and fertilizer are added as needed to aid the remediation process. This treatment process reduces or eliminates contaminants and harmful characteristics. The piles are not diluted to meet treatment goals, but incidental dilution may occur.

# XIII. Annual Report – WAC 173-350-320(6)(b)

DTG will prepare and submit an Annual Report to YHD and Ecology by April 1 immediately following the reporting year. The Annual Report will include:

- Name and address of the Facility
- Calendar year covered by the report
- Annual quantities and types of PCS handled by the PCS operation, including amounts received, amounts removed, and the amount of PCS remaining at the PCS operation at year's end in tons or cubic yards
- Destination of PCS transported from the PCS operation for processing or disposal

# Appendix A – Site Plan



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#### Appendix B – Emergency Action Plan

#### INTRODUCTION

The purpose of this plan is to ensure the health, safety, and welfare of employees at DTG and to reduce the adverse impact of possible emergencies on property and the community. This plan is adopted in accordance with Occupational Safety Standard 29 CFR 1910.38, WAC 296-24 and other applicable law.

An emergency situation is any situation in which there is injury, loss of life; significant property damage or emergency services are needed, including medical treatment, rescue, fire, and hazardous substance control and mitigation. This plan establishes programs of response to: Fire, earthquake, flooding, medical emergency, violent criminal threat, bomb threat, gas leak/power outage and environmental contamination.

#### PROGRAM ADMINISTRATOR

The Site Manager is the Program Administrator.

The Program Administrator is responsible for:

- 1. Implementation of this Emergency Action Plan.
- 2. Employee training with respect to this Emergency Action Plan.
- 3. Ongoing compliance with this Emergency Action Plan.

All DTG employees must be familiar with and comply with this Emergency Action Plan. Failure to comply with this Plan may lead to disciplinary action, including suspension or termination of employment.

#### EMERGENCY COORDINATOR

The Site Manager is the <u>Emergency Coordinator</u> in charge of DTG response to every emergency. The Emergency Coordinator must ensure appropriate measures are taken in the event of an emergency, notify appropriate authorities of the emergency, conduct all follow-up investigations and complete all necessary reports.

#### EMERGENCY EQUIPMENT

- Emergency Action Plan
- Personal Protective Equipment
- Fire Suppression Equipment
- Eyewash Station
- Fully Stocked First Aid Kit (Office)
- Material Safety Data Sheets
- Hazardous Spill Kit

#### EMPLOYEE TRAINING

All employees will be trained about the contents of this Emergency Action Plan when they are initially hired, on an annual basis and whenever this Emergency Action Plan is materially revised.

Mock emergency response drills will be performed on a periodic basis.

A copy of this Emergency Action Plan will be maintained in the site office, available to employees at all times.

#### PERIODIC PLAN REVIEW

On an annual basis the Program Administrator will review this Emergency Action Plan and make any modifications or additions as may be necessary at such time.

#### COMMUNICATION/ALARM SYSTEM

Should a perceived emergency situation arise, the following four steps are to be followed in response:

- 1. Whoever observes an emergency ("Reporting Party") must immediately **call 911** if the situation involves a medical emergency or a threat of medical emergency. If a phone is not accessible, the Reporting Party will contact the scale office by radio and the scale attendant will call 911.
- 2. The Reporting Party must inform the Emergency Coordinator by phone or by face to face contact.
- 3. The Emergency Coordinator will assess the situation, and based upon that determination, consult with internal company resources and/or call for outside assistance, including 911 emergency response if applicable.
- 4. The Emergency Coordinator will inform employees and visitors of the emergency situation as needed to protect human health and the environment.

#### EVACUATION PROCEDURES

Employees will be notified by the Emergency Coordinator if evacuation of the facility is necessary. Should an evacuation of the premises be necessary, employees shall do the following:

- 1. Proceed to the nearest exit, notifying others as you go. Leave your personal belongings and company property as is. DO NOT WASTE TIME BY COLLECTING THESE ITEMS. Your safety is most important at this time.
- 2. Emergency escape routes are posted throughout the Facility and in scale office. A copy of the Emergency Escape Routes is included as **Attachment C**.
- 3. Proceed in a CALM AND ORDERLY fashion to the primary assembly area. If the primary assembly area is not a safe distance from the hazard, you will be informed to proceed to the secondary assembly area. The primary assembly area for DTG Recycle Yakima is the main driveway entrance.
- 4. Assist handicapped persons to the nearest exit and/or assembly area.
- 5. The Emergency Coordinator is responsible for ensuring that all personnel have evacuated the premises and are present in their designated assembly area.
- 6. The Emergency Coordinator will take roll call to account for all employees and visitors. Any unaccounted-for persons will be reported to emergency response professionals.

7. No person may re-enter the area or building until instructed to do so by the Emergency Coordinator. No person may leave the assembly area until instructed to do so by the Emergency Coordinator.

# FIRE RESPONSE

- 1. **Call 911** if the fire cannot easily be put out with a fire extinguisher or dirt.
- 2. Activate the fire alarm system, or communication process, to alert every one of the fire.
- 3. Inform the Emergency Coordinator of the following:
  - a. Type of fire.
  - b. Location of fire.
  - c. Extent and size of fire.
  - d. Injuries.
  - e. Action taken, if any
- 4. Use the fire extinguisher, water, or loader to put out small (waste basket size) fires, IF SAFE TO DO SO and if you have been trained to use the equipment. Never put your personal safety at risk.
- 5. Evacuate the building or area of the fire (if necessary) in accordance with Evacuation Procedures.
- 6. The Emergency Coordinator will meet the responding fire engine and direct them to the fire.
- 7. The Emergency Coordinator will complete all necessary reports and notifications to proper authorities and company personnel.
- 8. If clothing catches fire, STOP, DROP, AND ROLL. Stop where you are, drop to the floor, and roll over and over to smother the flames.

#### MEDICAL EMERGENCY RESPONSE

The overall responsibility for medical assistance and rescue is that of the outside emergency response agencies, such as the fire department. **Attachment A** lists the emergency response agencies that may be needed.

Persons trained and certified in first aid/cardiopulmonary resuscitation ("CPR") may assist injured employees as long as these duties can be performed safely without personal risk to self or others. **Attachment B** lists personnel trained in basic first aid and CPR, if any.

- 1. Immediately notify the Emergency Coordinator.
- 2. Provide the following information:
  - a. Type of emergency.
  - b. Location of victim.
  - c. Extent of injuries or illness.
  - d. Number of injured/ill persons.
  - e. Actions taken, if any.
- 3. Locate first aid kit and administer first aid, if necessary (first aid and CPR to be administered by certified personnel only).
- 4. If outside medical assistance is needed, **call 911.**

- 5. Serious injuries or illness such as head or spinal injuries, broken bones, serious burns, excessive bleeding, or chest pains require immediate emergency medical assistance **ALWAYS CALL 911**.
  - a. A designated person will wait outside to meet and direct paramedics, ambulance, etc., to the location of the injured or ill person.
  - b. If the person has been exposed to a hazardous material, obtain a copy of the Material Safety Data Sheet ("MSDS") for the emergency provider.
  - c. Check employee's file for emergency contact name and phone number for Emergency Coordinator to notify of emergency situation.
- 6. Emergency Coordinator will complete all required reports and notifications to proper authorities, company personnel, or family member.
- 7. Non-serious injuries or illnesses (headache, cold, itching, nausea, etc.) may require the employee to be transported to the clinic or hospital for additional treatment.
  - a. The Emergency Coordinator will contact the clinic or hospital and inform them of the nature of the injury, or illness, and the number of employees being transported.
- 8. Nonwork-related injuries/illnesses should be referred to the employee's own personal physician for treatment.
- 9. Never leave the injured, or ill, person alone.

# EARTHQUAKE RESPONSE

#### During the Earthquake

- 1. Remain calm.
- 2. Take cover **beside** a desk or table. Protect your head and neck.
- 3. Stay away from windows and objects which could fall on you.
- 4. Stay where you are DO NOT RUN OUTSIDE. Falling debris may cause injury.
- 5. If outdoors, stay in an open area DO NOT ENTER A BUILDING.

#### After the Earthquake

- 1. Be prepared for aftershocks.
- 2. Check for injuries.
- 3. Administer first aid to injured parties if you are trained and willing to do so. Do not move them unless they are in immediate danger of further injury.
- 4. Stay put unless instructed to leave area by Emergency Coordinator.
- 5. DO NOT USE matches, electrical switches, or electrical appliances, in case of gas leaks.
- 6. The Emergency Coordinator will check for gas leaks, fires, broken water mains, etc.
- 7. The Emergency Coordinator will assess building for damage.
- 8. If necessary, or directed to do so by the Emergency Coordinator, evacuate the building. Be aware of structure damage that may exist and assist both the physically impaired and injured.
- 9. Turn a battery-operated radio, or phone, on to monitor the emergency situation, or condition of surrounding areas.

#### NATURAL GAS LEAK/POWER-OUTAGE RESPONSE

- 1. Notify Emergency Coordinator immediately.
- 2. If a gas leak exists, open all doors and windows.
- 3. If directed to do so by the Emergency Coordinator, evacuate the building in accordance with Evacuation Procedures. The Emergency Coordinator will take roll call to account for all personnel.
- 4. The Emergency Coordinator will attempt to determine cause or problem, call for emergency assistance from fire department, Gas Company, electric company, or other necessary source.
- 5. If a gas leak, DO NOT LIGHT MATCHES, LIGHTERS, USE ELECTRICAL APPLIANCES, OR ELECTRICAL SWITCHES.

#### FLOODING RESPONSE

- 1. Notify the Emergency Coordinator. The Emergency Coordinator will assess extent of damage and determine further actions to be taken.
- 2. The Emergency Coordinator will turn off all electrical equipment and ensure that all electrical power has been de-energized in flooded area.
- 3. If necessary, evacuate the building in accordance with Evacuation Procedures.

#### VIOLENT/CRIMINAL BEHAVIOR

- 1. Be alert to suspicious situations, or persons, and report them immediately to your supervisor. If you notice a suspicious situation or person loitering around, immediately notify the Site Manager.
- 2. If you are the victim, or are involved in any violent or criminal act, as soon as possible, notify the police and report the incident. Inform your immediate supervisor.
- 3. If you witness a violent or criminal act, immediately notify the police and report the act. DO NOT GET INVOLVED.
- 4. DO NOT TAKE ANY UNNECESSARY CHANCES. REMAIN CALM AT ALL TIMES.

#### BOMB THREAT RESPONSE

- 1. Any person receiving a phone call that a bomb, or other explosive device, has been placed on the premises is to ask the caller the following questions:
  - a. When is the bomb going to explode?
  - b. Where is the bomb right now?
  - c. What does the bomb look like?
  - d. What kind of bomb is it?
  - e. What will cause the bomb to explode?
  - f. Why was the bomb placed?
  - g. What is your name, address, phone number, etc.?
- 2. Write down the answers to the above questions.
- 3. Call 911.
- 4. Notify the Emergency Coordinator.

- 5. If the bomb threat is received by mail, do not further handle the letter, envelope, package, etc., notify the Emergency Coordinator immediately.
- 6. If requested by the Emergency Coordinator, evacuate in accordance with Evacuation Procedures.

# HAZARDOUS SUBSTANCE EXPOSURE RESPONSE

- 1. Notify the Emergency Coordinator.
- 2. In case of chemical inhalation:
  - a. Remove the victim from the area into fresh air.
  - b. Call 911, if outside assistance is required.
  - c. Provide CPR if the employee stops breathing (CPR to be administered by certified personnel only).
  - d. Obtain copy of MSDS for medical provider.
- 3. In case of eye contact with chemical
  - a. Review copy of MSDS sheet for proper eye washing instructions and follow instructions. Note that most chemicals are treated by flushing with water, but that in some cases, water is not recommended. PAY ATTENTION TO THE MSDS.
  - b. Locate eye wash, shower, or fountain.
  - c. If advised, rinse the eye with cold water for a minimum of 15 minutes.
  - d. Call 911, or transport to clinic or hospital, if necessary.
  - e. Obtain copy of MSDS for medical provider.
- 4. In case of skin contact with chemical
  - a. Review copy of MSDS sheet for proper instructions and follow instructions. Note that most chemicals are treated by flushing with water, but that in some cases, water is not recommended. PAY ATTENTION TO THE MSDS.
  - b. Flush the skin with cold water for a minimum of 15 minutes.
  - c. Remove contaminated clothing.
  - d. Follow additional instructions on MSDS.
  - e. Call 911, or transport to clinic or hospital if necessary.
- 5. In case of ingestion of hazardous material
  - a. Review copy of MSDS for instructions.
  - b. Contact Poison Control Center for emergency procedures.
  - c. Call 911, or transport to clinic or hospital if necessary.

<u>REMEMBER</u>: TO ALWAYS CHECK MSDS FOR THE NECESSARY FIRST AID OR MEDICAL TREATMENT INSTRUCTIONS. PROVIDE COPY OF MSDS TO MEDICAL PROVIDER.

#### HAZARDOUS SUBSTANCES SPILL and REMOVAL RESPONSE

- 1. Notify the Emergency Coordinator immediately.
- 2. Identify source of spill.
- 3. Cover or dike around spilled material to prevent from getting into storm water or sewer drains using materials in the spill kit or other available materials.
- 4. Absorb spilled material. The absorbing material must be compatible with the spilled material. Apply absorbent from the outer edge of the spill to the center. Use a shovel for longer reach.

5. Consult with Site Manager for further direction on cleanup and disposal. Site Manager, in consultation with staff or outside environmental experts, will direct all clean-up, disposal (through a Hazardous Waste Vendor) and governmental reporting activity in compliance with applicable laws and regulations.

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# ATTACHMENTS TO THE EMERGENCY ACTION PLAN

- Emergency Action Plan Quiz
- Attachment A: Emergency Contact Numbers
- Attachment B: First Aid/CPR Trained Personnel
- Attachment C Emergency Evacuation Routes

# **EMERGENCY ACTION PLAN QUIZ**

- 1. Who is the Emergency Coordinator?
- 2. Who do you notify if an emergency arises while you are at work?
- 3. What is the first thing you would do if you noticed a fire?
- 4. What are the Evacuation Procedures?
- 5. What do you do if your clothing catches fire?
- 6. What do you do if a co-worker is injured by equipment while working?
- 7. What do you do if you witness a violent or criminal act?
- 8. In the event of a chemical exposure what is one thing that you should do regardless of the type of exposure (inhalation, skin, and eye)?
- 9. Where should you go when you evacuate the building?
- 10. What do you do in an earthquake?

# ATTACHMENT A:

# **EMERGENCY CONTACT NUMBERS**

Name/Agency	Telephone Number
Site Manager – Brooks Franklin	425-354-0154
Safety and Environmental Advisor – Paul Jerome	425-903-0317
Emergency Notification Numbers:	
Ambulance/Police/Fire	911
Non-Emergency Fire	509-575-6060
Non-Emergency Police	509-575-6200
Insurance Company — Darrin Mroz	619-938-2536
Public Health — Yakima Health District	509-575-4040
National Response Center	800-424-8802
Occupational Safety & Health Administration (OSHA)	800-321-6742 24 hrs.
State Emergency Response Commission: Division of Emergency Management Spill Response Center	800-258-5990
Washington Dept. of Ecology	509-575-2490
Yakima Regional Clean Air Agency	509-834-2050
Washington Utilities & Transportation Commission	800-562-6150
Washington Poison Center	800-222-1222

#### ATTACHMENT B:

# FIRST AID/CPR TRAINED PERSONNEL

Brooks Franklin Wendy McConnell Darryl Melton Jarod Stone Beatrice Sybouts Leonard Cloutier Jesus de Santo Derek Evans

# ATTACHMENT C:

# **EMERGENCY EVACUATION ROUTES**

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Appendix C – Sample Log Forms

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TICKETING DTG Enterprises (SCALE)	
CUSTOMER	SEARCH
Cash Costomer - IB	
PRODUCT	YARD 01
ORDER INFO	PRODUCT ID 143
	DESCRIPTION BRUSH CY
TICKET INFO	YARD 01
	PRODUCT ID 144
	DESCRIPTION STUMPS (SM)
LBS	YARD 01
	PRODUCT ID 145
	DESCRIPTION LIME CY
	YARD 01
	PRODUCT ID 146
	DESCRIPTION LIME / UNLD
	YARD 01
	PRODUCT ID 147
	DESCRIPTION CERTIFIED WEIGH TICKETS
	PRODUCT ID 148
	VARD 01
	DRODUCT ID 140
	VARD 01
	PRODUCT ID 150
	DESCRIPTION ASPHAIT CY
	VARD 01
	PRODUCT ID 151
	DESCRIPTION CONCRETE CY
	YARD 01
	PRODUCT ID 154
SAVE	DESCRIPTION PCS (Petroleum Contaminated Soil) \$30/Ton
DS TODAY: 12 NEXT TICKET 511028 TS TODAY: 142.41 TICKET DATE 05-22-2020	SCALE 1
Type here to search	\$29 AM

8624 219th St. S.E. • Woodinville, WA 98072 Phone: (425) 549-3000 ap@dtgrecycle.com 51240
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Phone
Commodity
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County:

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**Yakima Health District** 1210 Ahtanum Ridge Drive Union Gap, Washington 98903 Phone (509) 575-4040



April 8, 2020

Mr. Kipp Silver Able Clean-up Technologies, Inc. P.O. Box 6185 Spokane, WA 99217

RE: Smitty's Conoco #190, 301 North 1st Street, Yakima, WA: Petroleum Contaminated Soil

Mr. Kipp Silver,

This office has reviewed the data on the above mentioned project. The data submitted indicates that the contaminant which require) remediation is gasoline. Based on the data submitted it has been determined that the soil may be processed at the Anderson PCS Facility provided that all handling is in accordance with the procedure that has been approved by this office and Washington State Department of Ecology. This letter is to notify you that currently the soil will be considered to be stored on the property and no treatment can begin until the total fee is paid. Waste material may be stored for up to 90 days. Anderson PCS Facility will notify me of the total number of tons delivered for treatment and I will bill you for the remainder of the fee at that time.

FEE ACCOUNT:

PROJECT NAME:

Able Clean-up Technologies, Inc.

Smitty's Conoco #190 301 North 1st Street Yakima, WA

PRE-TREATMENT AUTHORIZATION:

TONNAGE FEE AT \$0.60 PER TON:

BALANCE OWED:

(Based on time spent prior to soil delivery

to the site at \$141/hour)

To be determined after delivery

To be billed after delivery

If you have any questions regarding this letter, please contact me at (509) 249-6562.

Sincerely,

Jal Shut

Ted Silvestri, RS Environmental Health Specialist

cc: Anderson PCS Facility

# **DTG - PCS QUESTIONAIRE**

PCS APPROVAL DATE:
PCS RECEIVED DATE:
PCS RELEASE DATE:
PCS RECORD DESTROY DATE:
PCS/HEALTH DISTRICT JOB NAME:
COMPANY NAME/INFO FINANCIALLY RESPONSIBLE:
HAULING COMPANY INFO:
TON TOTAL:
CONTAMINATE / PPM'S:
BILLED? (YES OR NO)
TREATMENT OR STOCKPILE?:
TONNAGE SENT TO HEALTH DISTRICT?: (YES OR NO)
STAKE MARKER PUT IN PILE?: (YES OR NO)
PILE PUT ON PCS MAP?: (YES OR NO)

# PETROLEUM CONTAMINATED SOIL TO BE REMEDIATED

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PILE CT. P	ILE #	SITE DESCRIPTION	CONTAMINANT / PPM	APP. DATE	TONS REC'D	TED	MA P	STA KE
								$\vdash$
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### PETROLEUM CONTAMINATED SOIL TO BE REMEDIATED

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DILE				APP.	TONS			
CT.	PILE #	SITE DESCRIPTION	CONTAMINANT / PPM	DATE	REC'D	TED	P	KE
1	3	Delta Petroleum Gray Well Site	diesel - 250.000	10/5/2009	536.02	V	V	V
2	30	Trolley Barn	HEAVY OIL - 4.490	5/27/2015	1.587.15	V	V	V
3	31	YTC Roll-Off Bin 2015	8780 - Gas/Heavy oil - 16.200	6/17/2015	9.34	V	V	V
4	32	1111 South 13th Avenue	diesel range - 25.300	7/28/2015	79.63	V	V	V
5	36	Old Thorp Hwy Truck Accident	diesel - 4.880	5/21/2015	7 29	V	v	V
6	37	Astro #113 Ellensburg, WA	350 - Gas/11.000 - Die/5.000 Heavy oil	11/18/2015	3 062 16	V	V	V
7	40	Beverly Trestle Transformer Spill Beverly Junction, WA	Mineral Oil - 24.000	4/25/2016	272.88	V	V	V
8	43	YTC PCS Bin - May 2016	20.000- Die/11.000 Heavy Oil	5/25/2016	7.10	V	V	V
9	44	Summit Inn Gas Station	7,900 - Gas / 1,800 Heavy Oil	6/21/2016	72.07	V	V	V
10	47	Central Pre-Mix Hydraulic Spill	Heavy Oil - 3.660	8/18/2016	7.46	V	V	V
11	48	Whitman College Heating Oil Tank Walla Walla, WA	Diesel - 12.000	10/17/2016	15.77	V	V	V
12	50	Former Noland Decoto Service Center	Heavy Oil - 13,920	9/12/2016	23.58	V	V	V
13	52	West Richland Spill 97306 Snively Rd. W. Richland	9,300/DIE	2/16/2017	6.71	V	V	V
14	53	Big B Minimart 1611 Canyon Rd. Ellensburg, WA	2,600 - Gasoline / 24,000 - Diesel	10/17/2016	131.35	V	V	V
15	54	Port of Kennewick Gas Tank Removal 211 E. Columbia Dr.	6,400 - Gasoline	5/31/2017	48.24	V	V	V
16	55	CHS-Cowiche, 200 Cowiche City Rd. Cowiche, WA	DIE 4,710	9/12/2017	37.28	V	V	V
17	56	Highland HS CTE Proj. 17000 Summitview Rd. Cowiche	22,400 Heavy Oil / 109 Gas	9/12/2017	34.12	V	V	V
18	57	Hahn Motors Yakima, WA	3,800 DIE / 58,000 OIL	7/19/2017	7.08	V	V	V
19	58	City of Toppenish Shops 8 Buena Way, Toppenish, WA	Gas - 180	11/17/2017	13.71	V	V	V
20	59	Calaway Trading 1900 Dolarway Road, Ellensburg, WA	2,470 DIE / 4,320 HEAVY OIL	12/1/2017	59.66	V	V	V
21	60	Granite Diesel Spill, 951 Holmason Rd. Sunnyside, WA	DIE - 3,000	1/19/2018	29.26	V	V	V
22	61	Outlook Farm Outlook, WA	25,000-Heavy Oil / Diesel - 18,000	1/31/2018	5.02	V	V	V
23	62	294 Williams Blvd -Waste Oil- Richland, WA	Heavy Oil - 15,000	10/13/2017	43.56	V	V	V
24	63	294 Williams Blvd -GAS/DIE- Richland, WA	32,000 Gas / DIE 4,800	10/13/2017	129.75	V	V	V
25	64	123 Floral Lane Helicopter Crash Outlook, WA	DIE-56,000	3/12/2018	105.55	V	V	V
26	65	17814 Road 4 NW, Quincy WA	DIE-44,000	4/4/2018	20.43	V	V	V
27	66	Coleman Oil Facility #2 1 E. I Street Yakima, WA	4,500 DIE / 43,500 Heavy Oil / 199 Gas	9/12/2017	21.61	V	V	V
28	67	100 Division, 100 Division Yakima, WA	230 DIE / 2,000 HEAVY OIL	2/21/2018	6.43	V	V	V
29	68	Diesel Spill Near Cle Elum, I-82 Near Cle Elum	12,600 - DIE	3/26/2018	43.76	V	V	V
30	69	Tim Ponds Hydraulic Spill Yakima, WA	Heavy Oil - 8,200	6/4/2018	10.60	V	V	V
31	70	Pacific Steel Site #2018 409 Butterfield Rd. Yakima, WA	119 GAS / DIE 7,760 / HO 13,700	8/6/2018	130.00	V	V	V
32	71	Union Gap Decant Facility 100 Yak. Valley Hwy. Wapato	HEAVY OIL - 3,100	9/5/2018	280.16	V	V	V
33	72	109 North Wenas Rd. Selah, WA	Gas - 3,100	9/11/2018	22.44	V	V	V
34	73	Waste Management Truck Spill Near Badger Pocket, WA	Heavy Oil - 3100	10/2/2018	160.29	V	V	V
35	74	1451 Mapleway Rd. Gas Spill	Gas - 95,000	11/6/2018	91.88	V	V	V
36	75	4464 Swakane Canyon Rd. Chelan, WA	Heavy Oil - 140,000 / DIE 8,800	3/12/2019	0.74	V	V	V
37	76	948 May Ave. Walla Walla	Heavy Oil - 3,600	5/16/2019	185.03	V	V	V
38	77	1700 Morgan Rd. Sunnyside, WA	Heavy Oil 9,050 / Gas 123	5/24/2019	205.04	V	V	V
39	78	6940 Fort Rd. Wapato, WA	GAS 10,600	6/3/2019	841.27	٧	V	V
40	79	H.R. Spinner Truck Spill Hwy 97 & La Rue Rd. Toppenish	DIE 1,012	5/31/2019	30.60	٧	V	V
41	80	14306 West Acord Rd. Benton City, WA	DIE 55,000	6/14/2019	3.49	V	V	V
42	81	Outlook Elementary 3800 Van Belle Rd. Outlook, WA	DIE 8,000	7/17/2019	16.77	٧	V	V
43	82	Hwy 12 Truck Accident July 2019 Naches, WA	DIE 33,000ppm	7/24/2019	4.35	V	V	V
44	83	Consolidated Drop Box July 2019 Yakima Training Cntr	Gas 16,000/ Diesel 96,000 / Heavy Oil 51,000	7/15/2019	19.05	V	V	V
45	84	RyeGrass Gravel Pit I-90 Kittitas, WA	DIE / 2400ppm	9/24/2019	19.61	V	V	V
46	85	Yakima Mill Site aka Boise Cascade Mill Site	GAS 180 / DIE 11,900 / HEAVY OIL 28,900	10/2/2019	117.11	V	V	V
47	86	Highland Quick Stop 16841 Summitview Rd Cowiche, WA	GAS 1,000	10/10/2019	101.99	V	V	V
48	87	WA Land Mgmt, LLC 7 sites & 7 Additional Sites	DIE 100,000	11/26/2019	3,983.56	V	V	V
	87	WA Land Mgmt, LLC 7 sites & 7 Additional Sites	DIE 100,000	11/26/2019	517.37			T
49	88	WA Land UST PCS Wapato, WA	GAS 428 / DIE 8,390	12/9/2019	163.05	V	V	V
50	89	Titan Electric Consolidated Petroleum Yakima, wa	DIE 47,000PPM	2/4/2020	95.71	V	V	V
51	90	Yakima Dynamart 202 S. 5th Ave. Yakima, WA	DIE 2,700	4/21/2020	73.98	V	V	V
52	91	Seattle Monstercross, Seattle, WA.	GAS 200-400	4/6/2002	1,013.50	V	V	٧
53	92	Coleman Oil Extra PCS Batch 1 E. I Street Yakima, WA	GAS 35,000	12/31/2019	2.92	V	V	V
54	93	Smitty's Conoco #190 301 N. 1st Street Yakima, WA	Gas	4/8/2020		Γ		V





41 ROCKY TOP RD YAKIMA, WA 98908 \* PO BOX 14203 MILL CREEK, WA 98082 \* (509) 965-3621 \* www.dtgrecycle.com

### **PCS SITE WEEKLY INSPECTION**

FOR WEEK OF\_\_\_\_\_

<b>ITEMS OF CONCERN:</b>			NOTES:
-	V	V	
PERIMETER BERM			
INTEGRITY:			
RUN ON / RUN OFF			
CONTROLS:			
STAKE MARKINGS:			
MAP ACCURACY:			
WIND BLOWN LITTER:			
PILE CROSS			
CONTAMINATION:			

INSPECTED BY:\_\_\_\_\_ DATE:\_\_\_\_\_

FOR WEEK OF\_\_\_\_\_

ITEMS OF CONCERN:			NOTES:
P	V	V	
PERIMETER BERM INTEGRITY:			
RUN ON / RUN OFF			
CONTROLS:			
STAKE MARKINGS:			
MAP ACCURACY:			
WIND BLOWN LITTER:			
PILE CROSS			
CONTAMINATION:			

INSPECTED BY:\_\_\_\_\_ DATE:\_\_\_\_\_

## Equipment Safety Inspection & Repair Report

Company		Date							
Location		Shift							
Job #	Job Name								
Equipment #	Туре								
Hour Meter	Mileage								
N/A = NOT APPLICABLE	OK = NO REPAIRS NEEDED	RR = REQUIRES REPAIR							
Fluids	Outside	Inside Cab							
NA OK RR Visible Leaks Oil Level/Pressure Coolant Level (check only when	NA OK RR Lights Steps/Hand Rails Tires/Tracks	NA   OK   RR     Image: Service   Image: Service     Image: Service   Image: Service </td							
Image: Second state	Exhaust Fenders	Fire Extinguisher Gauges							
Fuel Level     Engine Compartment       Battery Cable       Fan Belt       Hoses       Air Filter       Guards	Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system     Image: Second system   Image: Second system   Image: Second system	Horn     Hydraulic Controls     Glass (all sides)     Mirror     Roll Over Protection     Seat Belt/Seat     Steering							
Explanation of Defects									
		1							
Repairs or adjustments needed Repairs or adjustments NOT needed for safe equipment operation									
Operator's Signature									
Repairs or adjustments if needed COMPLETED by									
Mechanics's Signature Date									

Equipment Safety Inspection & Repair Report

201 East D Street Yakima, WA 98901 (509) 469 - TEST



p.1

### **NWTPH-HCID**

Lab/Sample No: Below

Date Collected: 04/07/15

Date Reported: 04/20/15

Supervisor: BKO

09703-hcid

Date Received: 04/07/15

ample Location: See below		Invoice#:	689							
Send Report To:	Sample Info	ormation		Matrix:	Soil	<b>William - Interne</b>				
Anderson Rock	Anderson R	ock Land	fill		na na faran da ana ang ang ang ang ang ang ang ang an					
41 Rocky Top Road										
Yakima , WA 98908										
NWTPH-HCID										
Analyte	HCID	Surrogate	Diesel	Heavy Oil	Oil Range	Gas				
Code/Method	WTPH-HCIE	Recovery	NWTPH-D	NWTPH-Dx	NWTPH-D	NWTPH-Gx				
Units	:	%	ppm	ppm	ppm	ppm				
Lab/Sample No Date Sample ID	Results	Results	Results	Results	Results	Results				
23009703 04/07/15  #1-Ransier Rd.	Heavy Oil	92.8	ND	521						
23009704 04/07/15 #2-5482 Summitview Ext	Heavy Oil	87.2		258						
23009705 04/07/15 #3-WVSD 9th grade	Oils	88.0		322	110					
23009706 04/07/15 #4-Brown Explore	Diesel/Oil	86.8	190	1200						
23009707 04/07/15 #5-Consolidated PCS 201	Diesel	86.6	268	ND						
23009708 04/07/15 #6-WSCO Astro Station	Gas	88.2		r		<25				
23009709 04/07/15 #7-AUG2012 Roll-off Box	Diesel/Oil	86.2	1540							
23009710 04/07/15 #8-Int. Cowiche&Summit.	Gas	87.6			~	41.2				
23009711 04/07/15 #9-LAU Trucking spill 10/26/12	Diesel	83.6	1660		:					
23009712 04/07/15 #10-Davis HS Utility	Diesel	87.0	<50		· · · · · · · · · · · · · · · · · · ·					
23009713 04/07/15 #11-Manhole 34	Gas	86.6		:		<25				
23009714 04/07/15 #12-914 E. YV Hwy.	Gas	87.4				<25				
23009715 04/07/15 #13-Seneca Foods	Gas	85.8				<25				
MRL			50	100	50	25				
· · · · · · · · · · · · · · · · · · ·										
		 	<u>.</u>		i					
i										
!										
						·····				
MRL (Method Reporting Level): Indicates the minimum reporting level required and obtained by the laboratory (always >MDL).										
Trigger: DOH Drinking Water response level.										
MCL (maximum cuntaminant level): Highest level recommended by the federal government for public water systems.										
ND (Not Detected): Indicates this compound was analyzed and not de	tected at a level great	ter than or equa	to the MRL.							
Approved Ry, Denie										

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Yakima Health District 1210 Ahtanum Ridge Drive Union Gap, Washington 98903 Phone (509) 575-4040

J ter

May 5, 2015

Ron Anderson Anderson PCS Treatment Facility 41 Rocky Top Road Yakima, WA 98908

RE: Release of PCS batches.

Mr. Anderson:

This office has reviewed the post treatment test data on the following projects:

Manhole 34 LAU Trucking Spill, October 26, 2012 August 2012 Roll Off Box, Yakima Training Center Intersection of Cowiche City Road and Summitview Avenue Consolidated PCS – July 2011 WCSO Petroleum Astro Station 5482 Summitview Extension Brown Exploration Well Ransier road Diesel Spill West Valley School District, 9<sup>th</sup> Grade Center Seneca foods Warehouse Project 914 East Yakima Valley Highway West Valley School District Wash Bay

Based on the data submitted it has been determined that the soil contamination is below MTCA Method A levels. The above soils are hereby released.

If you have any questions, please call me at (509) 249-6562.

Sincerely,

Jod Shuti

Ted Silvestri, R.S. Environmental Health Specialist

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## Appendix F

Road and Work Area Surface Dust Field Sampling and Laboratory Testing Report, HWA



December 9, 2021 HWA Project No. 2005-120 Task 2000

### **DTG Recycling Group**

16504 9th Ave SE Suite 201 Mill Creek, WA 98012

Attention: Mr. John Martin

### Subject: FIELD SAMPLING AND LABORATORY TESTING REPORT ROAD AND WORK AREA SURFACE DUST SAMPLING AND TESTING DTG/Yakima Limited Purpose Landfill Yakima, Washington

Dear Mr. Martin.

In accordance with your request, HWA GeoSciences Inc. (HWA) performed field sampling and laboratory testing for the above referenced project. Herein we present a summary of our field activities and the results of our laboratory analyses. HWA conducted this sampling and testing program in accordance our scope based on procedures outlined in AP 42, Appendix C.1 and C.2, proposed and approved by DTG on November 18, 2021. The laboratory testing program was performed in general accordance with the guidelines in AP 42, Appendix C.2 and the appropriate ASTM Standards.

**FIELD SAMPLING:** Field samples were obtained at the Yakima Limited Purpose Landfill on November 30, 2021, by a geologist from HWA GeoSciences, Inc. Samples were obtained at five locations comprised of; three roadway locations (RS), and two work area surface (WAS) locations as shown on Figure A-1 in Appendix A. Each laboratory test sample consisted of a composite of 2 to 4 field samples obtained at each proposed test location. A field report describing activities during sampling at each location is presented in Appendix A along with photographs of selected site conditions during sampling. HWA conducted the field sampling under the observation of a representative of Yakima County Clean Air Agency.

**SAMPLE INFORMATION:** fifteen field samples were obtained to represent conditions at five locations consisting of either road surface or work area dust materials. Field samples were combined into five laboratory test samples representing surface dust material from each road surface(RS) and work area(WAS) and then split to test mass using a riffle-splitter in general accordance with ASTM D2013.

RS-1	Brown, well-graded SAND with silt and gravel (SW-SM)
RS-2	Brown, well-graded SAND with gravel (SW)
RS-3	Light yellowish brown, well-graded SAND with silt and gravel (SW-SM)
WAS-1	Light yellowish brown, well-graded SAND with gravel (SW)
WAS-2	Brown, well-graded SAND with gravel (SW)

Based on manual-visual methods, the soils descriptions for the test samples are as follows:

### **Testing Methodology**

**MOISTURE CONTENT OF SOIL:** The moisture content of the sample was determined in general accordance with ASTM D 2216. The indicated moisture content of the material is percentage by dry weight of soil. The results are shown on the Sieve Analysis of Aggregate Plots, Figures 1 through 5 and Table 1 below.

**SIEVE ANALYSIS OF AGGREGATE:** The particle size distribution of each sample was determined by dry sieving, in general accordance with ASTM C-136 as modified in Appendix C.2 which requires sieve shaking for 10-minute intervals until the difference between two successive pan weights is less than 3%. All the samples evaluated were shaken for 4 intervals of 10 minutes (40 minutes total) which is the maximum allowed per Appendix C.2, Section C.2.3, procedural step 7. The results are reported on the attached Figures 2 to 6 and Table 1 below.

Sample Designation	Unified Soil Classification	Moisture Content % by dry weight	Percent Passing the US. No. 200 Sieve
RS-1	SW-SM	4.4	5.3
RS-2	SW	3.2	4.5
RS-3	SW-SM	3.8	6.8
WAS-1	SW	5.7	2.4
WAS-2	SW	10.4	3.6

### Table 1Summary of Laboratory Testing

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**CLOSURE:** Experience has shown that test values on soil and other natural materials vary with each representative sample. As such, HWA has no knowledge as to the extent and quantity of material the tested samples may represent. HWA obtained samples in general accordance with the procedures outlined in AP 42 Appendix C.1, in an attempt to obtain samples representative of specific areas. However, HWA makes no warranty as to how representative either the samples evaluated, or the test results obtained are to field conditions outside of the specified sample areas.

No copy should be made of this report except in its entirety.

We appreciate the opportunity to provide laboratory testing services on this project. Should you have any questions or comments, or if we may be of further service, please call.

HWA GEOSCIENCES INC.

Steven E. Greene, L.G., L.E.G. Principal Engineering Geologist

mittudes\_

Rick Mueller, G.I.T. Geologist

Attachments:

Figures 1 through 5 Sieve Analysis of Aggregate

Appendix A

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Field Sampling Report





**GEOSCIENCES INC.** 



**GEOSCIENCES INC.** 



**GEOSCIENCES INC.** 



**GEOSCIENCES INC.** 

## APPENDIX A

# Field Sampling Report

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### DTG Anderson Road and Working Area Dust Collection

Conducted: 11-30-2021 by Rick Mueller/HWA GeoSciences, Inc.

Upon my arrival to DTG Anderson Rock and Demolition pit, just northwest of Yakima, WA, I met with Brooks Taylor of DTG and Wade Porter of Yakima Regional Clean Air Agency. Brooks Taylor familiarized me with the operations within the pit and directed me to sampling locations proposed by HWA. Wade Porter was on site to observe HWA's sample collection methodology and assure that samples were taken in representative areas.

### Work Area 1 (WAS 1.1 through 1.3)

The first location that samples were acquired was an area that DTG uses to bury miscellaneous construction demolition waste such as plastics and insulation. For the working area samples (WAS), a 15'x15' square was marked out and split into four equal quadrants of 7.5'x7.5'. From each quadrant, a 1-foot-wide area was swept from one end of the quadrant to the other. Material was collected using a broom and an enclosed dustpan. The material was transported from the dustpan and into a Ziploc storage bag. Three locations were chosen within the first working area. Samples collected were WAS 1.1, WAS 1.2 and WAS 1.3. These samples will be combined in HWA's lab prior to testing. Material collected appeared to consist of imported crushed gravel and possibly some native soils. While sampling, trucks coming in from outside of the site were dumping construction waste and a haul truck, excavator and dozer from within the site were tracking around the areas sampled.

### Work Area 2 (WAS 2.1 through 2.4)

The second location was a working area where wood debris is stored. Three more 15'x15' squares were marked out and split into quadrants, with a 1-foot-wide swath swept from each quadrant. Wade Porter with YRCAA requested an additional sample be taken from an area that appeared to differ from the rest within the working area, possibly underlain with imported gravel while the majority of the working area surface was covered in wood debris and possibly native soils. Samples were collected using the same methods as WAS 1, and labelled WAS 2.1, WAS 2.2, WAS 2.3 and WAS 2.4. The samples will be combined in HWA's lab prior to testing. There was limited traffic through the working area during HWA's time on site, though it appeared trucks hauling wood debris travelled through the area to dump and haul trucks from within the DTG site travelled through the area.

### Road Sample 1 (RS 1.1 through RS 1.3)

The third location sampled was a unpaved compacted soil and gravel road used to transport material between different locations on site. For roadway samples (RS) two grade stakes were measured 1-foot apart on each side of the road with a string around each stake, crossing the road to mark out a 1-foot-wide section across the entire width of the road. Samples were collected using the same methods as WAS 1 and WAS 2. Three of these areas were sampled, resulting in samples RS 1.1, RS 1.2 and RS 1.3. These samples will be combined in HWA's lab prior to testing. Haul trucks made frequent trips through the area, hauling soil and gravel to the first working area.

### DTG Anderson Road and Working Area Dust Collection

Conducted: 11-30-2021 by Rick Mueller/HWA GeoSciences, Inc.

### Road Sample 2 (RS 2.1 through 2.3)

The fourth location sampled was a compacted soil and gravel road used to transport material between different locations on site. For roadway samples (RS) two grade stakes were measured 1-foot apart on each side of the road with a string around each stake, crossing the road to mark out a 1-foot-wide section across the entire width of the road. Samples were collected using the same methods as described above. Three of these areas were sampled, resulting in field samples RS 2.1, RS 2.2 and RS 2.3. These samples will be combined in HWA's lab prior to testing. Haul trucks made frequent trips through the area, transporting soil and gravel to the first working area.

### Road Sample 3 (RS 3.1 and 3.2)

The fifth and final location sampled was a compacted soil and gravel road used to transport material between different locations on site. For roadway samples (RS) two grade stakes were measured 1-foot apart on each side of the road with a string around each stake, crossing the road to mark out a 1-foot-wide section across the entire width of the road. Samples were collected using the same methods as described above. Two of these areas were sampled (RS 3.1 and RS 3.2) rather than 3, as suggested by Wade Porter, due to safety concerns in order to minimize time spent within the roadway, which supported heavy traffic. These samples will be combined in HWA's lab prior to testing. Trucks bringing construction waste in from outside of site were travelling through the area as well as haul trucks transporting dirt and gravel from within the site.



Figure A-1. Sample Location Aerial Map, sample locations recorded via GPS.

### DTG Anderson Road and Working Area Dust Collection

Conducted: 11-30-2021 by Rick Mueller/HWA GeoSciences, Inc.



**Figure A-2.** Location of WAS1.1 after sampling. Each quadrant is 7.5'x7.5'. A one-foot-wide swath was swept across each quadrant. Facing Southeast.



Figure A-3. WAS1.3, facing west.



Figure A-4. WAS2.1. Note woody debris on ground within sample area. Facing northwest.



Figure A-5. WAS2.2. Facing west.



Figure A-6. WAS2.3



Figure A-7. RS1.1 marked out, prior to sample collection. Facing East.



Figure A-8. RS1.1 Marked out, after sample collection. Facing East.



Figure A-9. Location of RS1.2 prior to collection. Facing west.



Figure A-10. Location of RS1.3 after collection. Facing west.



Figure A-11. Location of RS2.1 after collection. Facing west.



Figure A-12. Location of RS2.2 after collection. Facing north



Figure A-13. Location of RS2.3 after collection. Facing Northeast.



Figure A-14. Photo showing collection of a road sample courtesy of Wade Porter.



Figure A-15. Photo showing sample storage procedure, courtesy of Wade Porter.