MEMORANDUM

TO: Rapid City Area Air Quality Board
FROM: Michelle A. Tech, Air Quality Specialist
DATE: 2021
RE: Compliance Plan Permit Annual Inspection Reports

The purpose of the annual inspection for facilities with Air Quality Compliance Plan Permits is to identify fugitive dust generating activities and assess if control measures are in use and adequate to control fugitive emissions. The annual inspection reports are attached.

<table>
<thead>
<tr>
<th>Compliance Plan Holder</th>
<th>Address</th>
<th>Expiration</th>
<th>Conformity w/ Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennington Co. Highway</td>
<td>3601 Cambell</td>
<td>4/21/2022</td>
<td>In conformity</td>
</tr>
<tr>
<td>City of Rapid City</td>
<td>Landfill, Utility</td>
<td>3/17/2023</td>
<td>In conformity</td>
</tr>
<tr>
<td>RCP&amp;E RR</td>
<td>Cambell, Main, &amp;</td>
<td>12/12/2023</td>
<td>In conformity</td>
</tr>
<tr>
<td>Heavy Constructors</td>
<td>4101 N. Deadwood</td>
<td>3/13/2023</td>
<td>In conformity</td>
</tr>
<tr>
<td>Neff Pitt (Heavy Constructors)</td>
<td>Elk Vale Rd.</td>
<td>3/13/2023</td>
<td>In conformity</td>
</tr>
<tr>
<td>J Scull</td>
<td>803 Industrial</td>
<td>12/12/2022</td>
<td>In conformity</td>
</tr>
<tr>
<td>RCS Storage</td>
<td>Fountain Plaza Dr.</td>
<td>12/12/2022</td>
<td>In conformity</td>
</tr>
<tr>
<td>Zandstra South Yard</td>
<td>Old Folsom Road</td>
<td>12/12/2022</td>
<td>In conformity</td>
</tr>
<tr>
<td>Butler Machinery</td>
<td>3601 N. Deadwood</td>
<td>3/10/2024</td>
<td>In conformity</td>
</tr>
<tr>
<td>Countryside South Road District</td>
<td>5450 Conifer Ln</td>
<td>6/10/2022</td>
<td>In conformity</td>
</tr>
<tr>
<td>TrueNorth Steel</td>
<td>3272 Lien St</td>
<td>3/10/2024</td>
<td>In conformity</td>
</tr>
<tr>
<td>DMI</td>
<td>3801 N Deadwood Ave</td>
<td>9/13/2024</td>
<td>In conformity</td>
</tr>
<tr>
<td>Black Hills Speedway</td>
<td>2467 Jolly Lane</td>
<td>9/13/2024</td>
<td>In conformity</td>
</tr>
</tbody>
</table>

Recommendation: Staff recommends the Air Quality Board acknowledge the Annual Inspection Reports for the Compliance Plan Permits.
GENERAL INFORMATION:

Facility Name: Black Hills Speedway
Location: 2467 Jolly Lane
Date of Inspection: August 19, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of the Black Hills Speedway facility is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan is in effect until September 10, 2021.

STAFF REVIEW:

On August 19, 2021 staff inspected the Black Hills Speedway facility at 2467 Jolly Lane.

Black Hills Speedway encompasses 34.07 acres on the northeast corner of Highway 44 and Jolly Lane. The facility is contained within a chain link fence. Spectator parking encompasses approximately 4 acres of gravel along the western portion of the site. The dirt racing and interior pits area is approximately 12.7 acres. The remainder of the parcel is primarily dirt or concrete grandstand seating and concessions.

The track is watered at least weekly during the race season. A water truck is on site and the source is a pond to the north of the track. Site grading occurs at twice a week during the race season.

SUMMARY:

It is staff’s opinion that Black Hills Speedway is in conformity with the existing Compliance Plan.
ANNUAL INSPECTION REPORT
August 2021

Butler Machinery Company Continuous Operations

GENERAL INFORMATION:
Facility Name: Butler Machinery Company
Location: 3601 Deadwood Avenue N
Date of Inspection: August 24, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:
The purpose of the annual inspection of the Butler Machinery Company facility is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan is in effect until March 10, 2024.

STAFF REVIEW:
On August 24, 2021 staff inspected the Butler Machinery Company facility located on Deadwood Avenue. The Butler Machinery Company facility consists of a sales and repair building, an on-site water treatment operation, rental and used equipment display areas, a paved employee parking lot, a dirt and rock staging area for repaired equipment, a gravel material storage area, a dirt stockpile, a recycled asphalt RV and truck parking area and a dirt and gravel turn-around adjacent to the entrance.

Material Storage Area
Butler Machinery maintains a 1200-ton dirt stockpile covering approximately 0.7 acres which is used to test repaired machinery. The stockpile is treated as needed with a surfactant for dust control and a portion of the stockpile has a vegetative cover.

Unpaved Storage Area
The unpaved storage area is surfaced with rock but due to the heavy machinery and the nature of the clay soils, a significant amount of the rock is buried. Sweeping the paved areas to keep the fugitive dust to a minimum and spraying water as needed is utilized.

The grassy and bare soil area to the South of the building is being used again as a storage area. Most of the equipment has been moved to the north side of the building.

Equipment Storage Areas
The used equipment and rental equipment display areas are surfaced with heavy gravel. An area adjacent to the entrance is used as a turn-around and surfaced with gravel.
Traffic on Unpaved Surfaces

Mag water is used as a dust suppressant on the unpaved surfaces with sweeping and watering employed as needed.

Paved Areas Around Building

Sweeping of the paved areas continues to be used as a method of fugitive dust abatement.

SUMMARY:

It is staff’s opinion that Butler Machinery Company is in conformity with the existing Compliance Plan.
GENERAL INFORMATION:

Facility Name: City Landfill
Location: 5555 S. Highway 79
Date of Inspection: September 24, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of the City Landfill operations and facility is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions.

STAFF REVIEW:

On September 24, 2021 staff conducted the annual inspection of the Landfill and operations were discussed with Jeff Barber and Dan Roth. The following potential sources of fugitive dust emissions were discussed:

- trackout to paved roads;
- fugitive dust from improved roads, unimproved roads and other surfaces;
- yard waste activities;
- recycled asphalt operations;
- active soil borrow area;
- concrete pit;
- garbage disposal area; and
- MSW compost operation.

Trackout to Paved Surfaces

Most of the unpaved access roads at the Landfill have been surfaced with a layer of recycled asphalt material. The main access roads into and around the facility are swept and watered as needed.

If trackout occurs on South Highway 79 the City Street Department sweeps the area on an as-needed basis, which is at least 3-4 times a year.
City of Rapid City Continuous Operations at the City Landfill

Fugitive Dust from Improved Roads, Unimproved Roads and Surfaces

All roads are sprayed down with water on an as-needed basis, including paved and unpaved, all the way up to the active fill site. Several improvements are complete and a project to renovate the scale house and vicinity are underway. The road into the tipping area is surfaced with recycled asphalt. The haul road adjacent to the borrow area and concrete pit is located at the top of a hill and is subject to wind erosion. Cell 17 has been capped and Cell 18 is in use. Currently a 40’ berm is being added around the Cell 18 for approximately 2 more years of use. The road on the west side of the landfill is to be reclaimed when this project is complete. Cell 19 will be started east of Cell 18 in 2 to 3 years. Traffic in this area typically travels at low speeds.

No fugitive dust from haul roads into the tipping area were observed at time of inspection.

Compost Activities

Yard waste and clean wood is deposited in the composting area where it is ground into compost material and transferred to windrows. Pine beetle kill contributes to the amount of material received. Some dust occurs from yard waste grinding operations, but the material can be wetted down and care is taken not to grind on windy days. After grinding, the material is stockpiled in the windrows to facilitate the composting process. During the composting process there is typically enough moisture in the product to control dust. Compost occasionally washes out onto the pavement and needs to be cleaned up periodically. The windrows are turned and after the windrow process is complete the screening and stockpiling process begins. Stockpiles of 3/4 compost, 3/8 compost and wood chips are stored in the screening area and are currently not available to the public due to persistent herbicide contamination discovered, which has led to a need to store temporary stockpiles in additional areas in the landfill.

Recycled Asphalt Operations

The recycled asphalt area is located below Cell 17. The surface of the asphalt storage area is recycled asphalt. Asphalt pieces are imported primarily during the summer months and stockpiled on the site, and the asphalt is milled by a contractor for use onsite.

Active Soil Borrow Area

The active borrow area is located on the southwestern side of the Landfill. A scraper removes soil and transports it to the active garbage disposal area. The upper portion of the borrow area is covered with wood chips which reduces the erosion potential.

Concrete Pit

There is an area of the Landfill adjacent to the asphalt area where trucks haul in concrete rubble and other inert materials for disposal and subsequent grinding for gravel use
onsite. This area is a large pit with steeply sloped sides. Traffic travels at slow speeds in this area which helps to minimize the dust.

*Garbage Disposal Area (Active Cell 18)*

The tipping area where public vehicles unload garbage to the active landfill is a fugitive dust source from commercial and residential vehicles. The garbage disposal area is shut down when wind speeds reach a sustained 30 mph. No visible fugitive emissions were observed at time of inspection. When visible fugitive emissions are observed, the area is watered down as needed.

Every day a spray similar to hydroseed is sprayed onto the active fill site to keep waste from blowing away. Six to eight inches of dirt is then added to the active site once a week.

*MSW Compost Operation*

The co-compost operation has been shut down as it is not cost effective. The buildings will be repurposed in the future.

*Customer Service Campus*

Construction of the Customer Service Campus greatly reduces the amount of fugitive dust emissions resulting from small vehicles driving into unpaved areas of the landfill as residential customers are no longer be accessing the tipping area and will only be driving on paved areas. It also eliminates the need for the landfill to be closed to the public on days when wind gusts are over 30 mph.

**SUMMARY:**

It is staff’s opinion that the City Landfill is in conformity with the City’s Fugitive Dust Compliance Plan.
ANNUAL INSPECTION REPORT

September 2021

City of Rapid City Continuous Operations at the City Street Division

GENERAL INFORMATION:

Facility Name: City Street Division
Location: 605 Steele Avenue
Date of Inspection: September 24, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of the City Street Division operations and facilities is to identify the fugitive dust generating activities and assess whether the control measures identified in the City’s Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan is valid until March 17, 2023.

STAFF REVIEW:

On September 24, 2021 staff met with Jeremy Cahill. The following potential sources of fugitive dust emissions were reviewed:

- street traction and deicing operations;
- sweeping operations;
- sandblasting operations;
- unpaved street and alley maintenance;
- paved street maintenance;
- truck fleet operations; and
- snow disposal site.

Street Traction and Deicing Operations

The primary method of street deicing on the west side of town is the use of enhanced corrosion inhibited magnesium chloride (mag water) and quarried sodium chloride (salt). Due to water quality concerns, the method used on the east side of town is a washed river sand and road salt mixed in a 6:1 ratio. The mixture ratio was changed from 5:1 to 6:1 due to water quality concerns. The salt and traction materials are stored in two domes and a storage building to eliminate exposure to the environment. Material is loaded into the buildings using loaders. The area is swept as necessary.

Street Cleaning and Sweeper Operations

The City has an ongoing year-round (temperature permitting) sweeping program to reduce the amount of particulate matter present on the streets that may become reentrained into the air from traffic or wind erosion. The Street Division currently has ten sweepers including one flusher truck. All of the sweepers are equipped with water.
City of Rapid City Continuous Operations at the City Street Division

The sweepers are cleaned out across the street from the Street Division at the Sweeper Dump Facility. The material is cleaned out of the sweepers on a daily basis and stored at this facility until it is hauled to the landfill for use as daily cover. All of the sweepers use water so the dumped material is moist and not subject to wind erosion while stored at the sweeper dump facility. The paved area at this facility is swept as needed, approximately once per week.

Sandblasting Operations

Equipment is sandblasted at the Street Division in an area between the salt domes to remove paint and rust, and then re-painted. Sandblasting material is swept immediately after sandblasting operations are complete. Sandblasting is not done on days with high winds when the fugitive dust is likely to be transported off site.

Storage and Equipment Parking Surface

The areas of the Street Division are paved with asphalt. This area is mainly used for equipment storage so there is very little traffic on the surface. Small stockpiles of gravel, ballast and cold mix asphalt are stored in the three bins located on the west side of the salt/sand storage building. These piles are protected from the wind so fugitive emissions are not typically generated. Small piles of fines for oil spill clean-up and pure sand for chip sealing operations are also stored on the northeast side of the northernmost salt dome and are stabilized with a crust and sediment socks. There is a stockpile of winter asphalt patch mix to the east of the salt domes behind the shops. The material is sticky and will not produce fugitive dust.

Paved areas are typically swept once per week during the spring and then on an as-needed basis. The paved areas around the facility were clean at the time of inspection.

Unpaved Street and Alley Maintenance

Public Works has taken measures to reduce the amount of dust generation potential from unpaved streets and other areas. Priorities for roadway paving are based on maintenance issues, drainage problems, complaints and requests received.

Paved Street Maintenance

Activities of paved street maintenance are handled through Engineering and administered through Public Works.

Truck Fleet Operations

The City Street Division has tarps installed on all but one of the dump trucks to prevent fugitive emissions and are used for hauling all materials except for snow.
Snow Disposal Site

The snow disposal site consists of the property located on East Saint Charles Street behind Taco John’s. It is an undeveloped piece of land with a horseshoe shaped gravel access road. The site is cleaned and bladed in the spring, and watered to develop a crust to prevent fugitive emissions.

SUMMARY:

It is staff’s opinion that the City Street Division is in conformity with the City’s Fugitive Dust Compliance Plan.
GENERAL INFORMATION:

Facility Name: City Utility Maintenance Division
Location: 225 E Main St N
Date of Inspection: September 24, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of the City Utility Maintenance Division operations and facilities is to identify the fugitive dust generating activities and assess whether the control measures identified in the City’s Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan expires on March 17, 2023.

STAFF REVIEW:

On September 24, 2021, staff inspected the Utility Maintenance shop. The following potential sources of fugitive dust emissions were reviewed:

- material storage area;
- dewatering pit;
- truck fleet operations; and
- unpaved parking, storage and equipment parking area.

The Utility Maintenance Division moved to 225 E. Main St. N. in the fall of 2015. The site is 4.5 acres and nearly completely paved.

Material Storage Area

The material storage area is located mainly west of the Utility Maintenance Building. Stockpiles of excavated dirt, backfill dirt, base material, and 1” clean rock are stored on site in three-sided concrete bins sheltered from the predominant northwesterly winds. This helps to reduce fugitive emissions from the stockpiles. The excavated dirt pile consists of material from water line break repairs so the material is saturated. The stockpile and surface of this area are to be watered if necessary to keep the dust suppressed. Concrete rubble, riprap, and sugar rock are stored on the east side of the building on the gravel-surfaced storage yard.

The paved areas of the Utility Maintenance Division are swept as needed.
City of Rapid City Continuous Operations at the Utility Maintenance Division

Dewatering Pit

A dewatering pit facilitates the handling of saturated dirt excavated from water line repairs. Water from the first dewatering pond when full is pumped to a second pond. When the pit is full of sediment, the material that is unsuitable for backfill is hauled either to the wastewater treatment plant or to the landfill. Some trackout occurs but is swept as needed.

Truck Fleet Operations

The Utility Maintenance Division has seven dump trucks available. Five of the dump trucks are equipped with tarps. A truck equipped with a tarp is used when hauling material that has the potential to generate fugitive dust. When hauling dirt from a water main break site, a dump truck without a tarp can be used because the material is saturated enough that fugitive emission potential is low.

Unpaved Parking, Storage and Equipment Parking Area

The storage and equipment parking area is surfaced with gravel. Fugitive emissions were not observed from the storage piles or the unpaved storage and parking area.

SUMMARY:

It is staff's opinion that the City Utility Maintenance Division is in general conformity with the City’s Fugitive Dust Compliance Plan.
GENERAL INFORMATION:

Facility Name: Countryside South Road District  
Location: Countryside South Subdivision, Sheridan Lake Road  
Date of Inspection: August 19, 2021  
Report By: Michelle Tech, Air Quality Specialist

GENERAL COMMENTS:

The purpose of the annual inspection of the Countryside South Road District is to identify the fugitive dust generating activities and assess whether the control measures are in use and adequate to control fugitive dust emissions.

Countryside South Road District is located in the Countryside South subdivision. The streets are paved, and traction materials are applied to the steep streets during the winter months. The Compliance Plan indicates that the roads will be swept two to four times per year.

STAFF REVIEW:

On August 19, 2021 staff inspected the streets located in the Countryside South Road District. The following road conditions were noted:

- Alfalfa Court was clean.
- Double Tree Road was clean with the exception of minor chips present at the intersection with Coneflower Court.
- Sandlily Court was clean.
- Coneflower Court was clean.
- There were small sand deposits from the adjacent private drive along the sides of the landscaped area near Conifer Lane on Countryside Boulevard.
- Blue Stem Court was clean except for a minor amount of loose chips from recent chip sealing operations in the cul-de-sac.
- Bitter Root Court was clean.
- Limelight Lane was clean.
Conifer Lane was clean.

- Scrub Oak Circle was clean with the exception of a small amount of chips at the entrance.
- Sweet Clover Circle was clean.
- Small amounts of chips were present at the entrance of Rockcress Court.
- Currant Court was clean except for minor deposits at the entrance.
- Daisy Lane had chips at the entrance and along the sides and at the low spot at the end before the turnaround.
- Barberry Court was clean.
- Barberry Circle was clean.
- Snowberry Lane was clean.
- Snowberry Court was clean.
- Columbine Court was clean.

**SUMMARY:**

The Countryside South Road District appears to be in general conformity with the approved Countryside South Road District Compliance Plan.
GENERAL INFORMATION:

Facility Name: Diesel Machinery Inc. (DMI)
Location: 3801 N. Deadwood Avenue
Date of Inspection: August 24, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of DMI is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan expires on September 13, 2024.

STAFF REVIEW:

On August 24, 2021 staff inspected Diesel Machinery Inc. (DMI).

Loadout Zone & Equipment Storage Area
The loadout zone and equipment storage area where construction equipment is loaded and unloaded for sale, rent, or repair is located on the south side of the property. A small amount of trackout was observed onto the paved areas. The surface is dirt. The entrance, parking at the building, and area to the north of the building and around Dakota RV on the same parcel is asphalt. A water truck is available for use when necessary, and the asphalt is swept as needed with their road broom that has a water system.

Repair Shop
The repair shop is accessed on the south and west sides of the building and that area is surfaced with dirt. Up to 100 CY of native soil is stockpiled in this area. The soil surface is watered as necessary, and the unposted speed limit is 10 mph.

Dakota RV & RV Storage Area
Dakota RV is on the north side of the property and is paved with asphalt. To the west of this area on the north side of the parcel is an RV storage area, which is surfaced with clean rock. Watering is used when necessary to mitigate fugitive dust.

SUMMARY:

At time of inspection, the facility appeared to be in conformity with the existing Compliance Plan.
ANNUAL INSPECTION REPORT
September 2021

Heavy Constructors Continuous Operations

GENERAL INFORMATION:

Facility Name: Heavy Constructors, Inc.
Location: 4101 N. Deadwood Avenue
Date of Inspection: September 30, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of Heavy Constructors, Inc. operations and facility is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan is in effect until March 17, 2023.

STAFF REVIEW:

On September 30, 2021 staff inspected the Heavy Constructors, Inc. facility on Deadwood Avenue. The facility consists of an office building, several storage and repair buildings, an employee parking lot, and equipment and material storage areas.

Material Storage Area

The northern material storage yard includes stockpiles of raw asphalt, asphalt millings, fill dirt that is stabilized with vegetation, and a small amount of concrete rubble. The road into the material storage area is surfaced with millings. The travel lanes are gravel, which are watered as needed to control dust. This area gets little traffic, and is only traveled on when trucks are hauling in and out. The rock construction entrance is in fair condition. A sweeper is used to clean up any mud tracking on Deadwood Avenue as needed. A water truck is used as needed for the storage areas and stockpiles.

Equipment Storage Areas

The equipment storage area on Lot 2 of Tract A is surfaced with recycled asphalt. The equipment/building material storage area mainly located on Lot 1 of Tract A is surfaced with gravel and dirt. The main travel lanes of the facility are surfaced with recycled asphalt. The posted speed limit is 10 miles per hour. Water is applied as needed.

SUMMARY:

It is staff’s opinion that Heavy Constructors, Inc. is in conformity with the existing Compliance Plan.
The purpose of the annual inspection of J Scull Construction is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The Compliance Plan permit is valid until December 12, 2022.

On August 12, 2021 staff inspected J. Scull Construction.

Material Storage Area (west of office)
At the time of inspection, approximately 600 CY of asphalt millings and 800 CY of rubble were stockpiled on site, as well as parts and some service trucks. Most of the equipment is stored across the street at 704 Industrial Ave.

The condition of the unpaved yard surfacing was fair.

Sweeping is completed as needed and estimated that the paved area and road are swept approximately 3 times a month.

Equipment Storage Area (704 Industrial)
The unpaved lot across the street at 704 Industrial is used for parking trucks, trailers, semis, and dump trucks. The gravel surface was in fair condition, except for the entrance where minor quantities of gravel had washed away and was tracked out into the alley.

It is staff’s opinion that J. Scull Construction is in conformity with the existing Compliance Plan.
ANNUAL INSPECTION REPORT

September 2021

Neff Pit Continuous Operations

GENERAL INFORMATION:

Facility Name: Neff Pit - Heavy Constructors, Inc.
Location: Elk Vale Road
Date of Inspection: September 30, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of the Neff Pit is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan is in effect until March 17, 2023.

STAFF REVIEW:

On September 30, 2021 staff inspected the Neff Pit located off of Elk Vale Road. The Neff Pit contains a construction debris disposal site and a concrete dump. A concrete batch plant was previously located on the site but was removed. The property is used for cattle grazing.

Asphalt millings cover the pit entrance road from Elk Vale Road up to the old concrete batch plant site to reduce fugitive dust generation potential. New millings have been placed in some stretches.

Stockpiles of asphalt debris, overburden rock, fill dirt, clean rock, base course, rip rap, waste gravel, and small piles of gravel are stored onsite. No activity was observed on the site at the time of inspection, but grading is underway to fill and level some areas, and Quinn Construction has a stockpiles they are accessing on the east side, including base course, asphalt millings, sand, shale, dirt, and asphalt debris. The rubble in the previous concrete dump has been covered and vegetated, and a new dump has been dug. A water truck is used as needed to control fugitive dust on site.

The entrance road into the pit area is surfaced with gravel. A gravel surface is in place of the old batch plant and appeared to be in good condition. The road leading to the construction debris site is surfaced with gravel. Pavement at the entrance to the site is swept as needed. No tracking was observed at time of inspection.

SUMMARY:

It is staff’s opinion that the Neff Pit is in general conformity with the existing Compliance Plan.
Pennington County Highway Department Continuous Operations

GENERAL INFORMATION:

Facility Name: Pennington County Highway Department

Location: 3601 Cambell Street

Date of Inspection: October 5, 2020

Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of the Pennington County Highway Department facility is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions.

STAFF REVIEW:

On October 5, staff met with Joe Miller and inspected the Pennington County Highway Department yard located at 3601 Cambell Street. Staff discussed the street traction and deicing operations, street cleaning and sweeper operations, material storage piles, storage yard, unpaved roads and paved street maintenance with Mr. Miller.

Deicing and Traction Control

According to Mr. Miller, approximately 1.3 tons/mile of deicing and traction material is used during a snow/ice storm event for safer vehicle travel, and no more than 1.5 tons/mile. The least amount of material is used to control cost and to control fugitive emissions.

Street Cleaning and Sweeper Operations

The Pennington County Highway Department utilizes two sweepers and three brooms, and all are equipped with water delivery systems. (2003 Johnson Model 705 Vacuum Sweeper, 2001 Elgin Eagle Model SC8000 sweeper, 2007 Superior Model DT80CT Broom, and a 2015 Superior DT80K side delivery broom). In addition, there are two skid steer loader attached brooms.

The water delivery system on the 2007 Superior Model Broom is insufficient to control fugitive emissions. Mr. Miller indicated that it is used in conjunction with a water truck that wets the road surface ahead of the open sweeper. He stated that sweepings are typically stockpiled in the area that they are sweeping and hauled to the landfill to be used for cover.

Mr. Miller indicated that county roads are swept two to three times a year, depending on the road; at least once in the spring after sanding season is finished and again before striping operations begin. Curb and gutters are swept in the fall before winter.
Pennington County Highway Department Continuous Operations

Material Storage Area

The material storage area is surfaced with gravel and is sprayed with water if activity in the yard is high. The yard has been re-graveled since the completion of the new building, including all travel lanes and some parking areas, and the entire yard was mag watered (MC-70). Some regrading and revegetation was also done to reshape the detention pond and provide better drainage. MC-70 or mag water is applied to areas of the storage yard as a dust suppressant when it is available. Rinse water from recent applications of magnesium chloride is sometimes applied to the main travel lanes in the stockpile area. The following estimated quantities in tons (unless otherwise specified) of materials were onsite at the time of inspection.

- Recycled Asphalt (2 piles) 200/100 ton
- De-icing sand 3800
- Class A rip rap 50
- Class B rip rap 100
- Class C rip rap 30
- Fill dirt 1000
- Type 2A chips 163
- Cold mix asphalt 40
- 3” ballast 100
- Mixed fill & 3” ballast 100

Fugitive dust controls for the stockpiled material with a potential to generate fugitive emissions consist of watering the stockpiles and also keep the height under 20 feet or less to guard against wind erosion. Stockpiles with a potential to generate fugitive dust are typically sprayed with water so that a crust will form to prevent fugitive dust from the stockpiles. Mr. Miller indicated that they typically do not have problems with fugitive dust. The piles aren’t disturbed regularly and when they are, care is taken to disturb as little as possible. Chips for oil injection chip sealing projects are sprayed down as needed when the pile is used daily, typically August through September.

The material hauling trucks are equipped with tarps and the tarps are used when hauling material that has a potential to generate fugitive emissions.

Unpaved Roads

Mr. Miller stated that most of the unpaved roads in the Air Quality Control Zone have been covered with recycled asphalt and then chip sealed, and that few roads in the Control Zone are still gravel. He indicated that they typically do not receive complaints from dust on unpaved roads in the Air Quality Control Zone. The County Commission’s Dust Abatement Policy allows the Pennington County Highway Department to apply a dust suppressant if the resident or landowner pays for the cost of the application. The county also shapes and waters the gravel road the day before the magnesium chloride is applied, which binds the chemicals tighter and keeps the road less dusty for a longer period of time. Typically a road that receives a magnesium chloride application won’t need to be re-graded for two years. No paving of any current gravel roads is expected at this time. They hope to increase the overlay program in the future. A long-range transportation plan would make recommendations for paving.
Pennington County Highway Department Continuous Operations

Paved Street Maintenance

Paved street maintenance is done by both the Pennington County Highway Department and contractors. The county does isolated roads, patching, and chip sealing, while contractors usually do crack sealing and some chip sealing. The use of a fog seal retains up to 40% more rock and helps reduce fugitive dust generation from the surface.

SUMMARY:

It is staff’s opinion that the Pennington County Highway Department is in conformity with the existing Compliance Plan Permit.
RCP&E (Formerly Genesee & Wyoming) Railroad Continuous Operation

GENERAL INFORMATION:

Facility Name: RCP&E (Rapid City, Pierre, and Eastern) Railroad

Location:
- Main Yard - 2230 Cambell Street
- Roundhouse - 500 Main Street
- Storage Yard - Maple Avenue
- Rail lines within the Control Zone

Date of Inspection: September 16, 2021

Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of the Rapid City, Pierre & Eastern (formerly Genesee & Wyoming) Railroad facilities is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The Compliance Plan is in effect until December 14, 2023.

STAFF REVIEW:

On September 16, 2021 staff met with John Sabo to inspect the RCP&E Railroad facilities. Staff discussed the dust from onsite gravel roads, transportation of materials in railcars, track out from the facilities, and ballast placement.

Cambell Street Facility

The Cambell Street facility is located at 2230 Cambell Street and has a paved entrance into the facility off of St. Patrick St. The facility contains a depot building with paved parking around the building. The paved road into the facility and the paved parking area were relatively clean.

The gravel roads and storage area at the facility appeared to be in good condition. Mag water is scheduled to be applied in October. Wind speeds at the time of inspection were 24 miles per hour and some blowing dust was observed. The speed limit in the yard is 25 miles per hour. The area was in good condition.

Approximately 80 tons of vegetated piles of bentonite-fouled ballast, 20 tons of sugar rock being placed as ballast currently and soon to be gone, 25 tons of old ballast pulled out for replacement immediately, 8 tons of base course, 3 CY of ¾” clean rock and 5 CY of 2” clean rock for use in the yard are currently stored at the facility. Maintenance materials for track maintenance are also stored at the Cambell Street facility.

Fugitive dust from railcars is not a problem because only covered hopper cars are used for fugitive dust generating materials.
Main Street Facility (The Roundhouse)

The Main Street Facility runs parallel to E. Main Street starting at the intersection with Steele Avenue to the intersection with Maple Avenue. The gravel surface of the area and road are in fair condition. Mag water is applied if needed. The two entrances into the area from E. Main Street are paved. Paved entrances are swept as needed. No trackout was observed at the time but has been seen in the past from railcar unloading truck traffic.

Maple Avenue (White Eagle) Facility

The Maple Avenue facility consists of a storage area for maintenance of way operations and a gravel road next to the railroad tracks. This area is surfaced with gravel. No track out was observed. The unposted speed limit in the area is 15 mph.

Ballast placement

Track maintenance was not observed at the time of inspection. The ballast is added as needed for track maintenance. Ballast is watered when it is loaded to be brought to the site.

Transportation of materials in railcars

Open top rail cars are not used to transport materials, as most of the railcars are covered hoppers or box cars. Typically there is not a problem with spills along the railroad tracks.

No trackout from the RCP&E Railroad facilities was observed during the inspection.

SUMMARY:

It is staff’s opinion that the RCP&E Railroad is in conformity with the existing Compliance Plan Permit.
GENERAL INFORMATION:

Facility Name: RCS Storage
Location: 2400 Commerce Road (Office)
         1314 Fountain Plaza Dr
         1408 Fountain Plaza Dr
Date of Inspection: September 30, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of the RCS Storage facility is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan is in effect until December 13, 2022.

STAFF REVIEW:

On September 30, 2021 staff inspected the RCS Storage facility on Fountain Plaza Drive and reviewed operations of the facility.

Former Material Storage Area

The former material storage area located on the west side of Fountain Plaza Drive is now an RV and boat storage lot. A 30,000 SF building for interior climate-control storage is nearly constructed, with landscaping scheduled to be complete to finish the project in one to two weeks.

Equipment Storage Area

The equipment storage area located on the east side of Fountain Plaza Drive is used for equipment storage and also contains miscellaneous small stockpiles of material. The new RCS office building is complete on the front of this area and has reduced the unpaved surface. Millings have been placed around the building’s paved areas to reduce the potential for fugitive dust and trackout.

Mr. Scull indicated that water is used as needed for dust control. Mr. Scull stated that they typically do not have problems with mud tracking but if tracking occurs Fountain Plaza Drive is swept.

SUMMARY:

It is staff’s opinion that RCS Construction is in conformity with the existing Compliance Plan.
GENERAL INFORMATION:

Facility Name: TrueNorth Steel
Location: 3272 Lien Street
Date of Inspection: August 12, 2021
Report By: Michelle A. Tech

GENERAL COMMENTS:

The purpose of the annual inspection of TrueNorth Steel is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan expires on March 10, 2024.

STAFF REVIEW:

On August 12, 2021 staff inspected TrueNorth Steel operations.

Sales Office & Shop Area
The sales office receives the most traffic. Watering occurs twice a day. The shop area appeared to be well-watered. The primary traffic in the shop area is forklifts and therefore the speed of those vehicles is slow and fugitive dust is much less of an issue here. Lien Street is swept by others approximately every 2 weeks and takes care of any trackout from their site.

North Loop
There are no stockpiles on the property. The north loop is a storage area for primarily fabricated tanks and appeared to be well-watered with no fugitive dust issues. Approximately every two weeks a semi-truck will travel the north loop for loading. The posted speed limit is 12 mph. The soil surface was in good condition at the time of inspection. Each spring mag chloride is applied.

SUMMARY:

At time of inspection, the facility appeared to be in general conformity with the existing Compliance Plan.
GENERAL INFORMATION:

<table>
<thead>
<tr>
<th>Facility Name:</th>
<th>Zandstra South Yard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Old Folsom Road (entrance at intersection of Creek Dr. and Marlin Dr.)</td>
</tr>
<tr>
<td>Date of Inspection:</td>
<td>August 19, 2021</td>
</tr>
<tr>
<td>Report By:</td>
<td>Michelle A. Tech</td>
</tr>
</tbody>
</table>

GENERAL COMMENTS:

The purpose of the annual inspection of the Zandstra South Yard is to identify the fugitive dust generating activities and assess whether the control measures identified in the Compliance Plan are in use and adequate to control fugitive dust emissions. The current Compliance Plan permit is valid until December 2022.

STAFF REVIEW:

Staff inspected the site on August 19, 2021. The site is used as a storage yard for equipment and raw materials.

Material Storage Area

The material storage area is located along Old Folsom Road and has stockpiles of raw asphalt, milled asphalt, concrete rubble, gravel and topsoil. An estimated 7,000 CY of milled asphalt remains on site, along with approximately 4,000 tons of raw asphalt that has not yet been milled and an estimated 2,000 CY of concrete rubble. Topsoil onsite is estimated at approximately 1,500 cubic yards, and a new stockpile of approximately 1,500 tons of gravel exists. Mr. Zandstra has indicated that to prevent fugitive dust on days when they haul materials, haul routes are soaked with water in the mornings to create a crust.

Equipment Storage Area

The equipment storage area is surfaced with gravel and appears to be in good condition.

No mud tracking was observed at or around the site at the time of inspection.

SUMMARY:

It is staff’s opinion that the Zandstra South Yard facility is in conformity with the Compliance Plan.