

City of Green – NEXUS Environmental Observations

Date: 07/06/2018

Environmental Inspector(s): James St. Ad. Zc

Weather & Soil Conditions: Sun; 76°F; 10-15 mph winds; wet and saturated soils

Observed from: Road R/W Within NEXUS R/W

Item/Location	BMPs	Y	N	N/A	Notes
Street Cleaning	Street Cleaning Evident	X			Recent street cleaning was evident. Streets were clean and free of sediment. Street cleaning was underway on Wise Rd and Arlington Rd during the site visit.
	No Tracking Observed	X			
	Street Cleaning Equipment Staged	X			
Rock Entrances	Properly Topdressed		X		Additional gravel topdressing of the construction entrances can help minimize track out onto the roadway.
	Check Dams in Ditchline	X			
Erosion/Sediment Control Devices	Properly Installed	X			Maintenance of erosion/sediment control devices ongoing (*see notes for details). Nexus EIs notified by Randy Burke (Nexus) during site walkthrough and maintenance was ongoing the same day.
	Functional	X			
	No Maintenance Recommended		X		
	No Additional SCD Recommended	X			
Stabilization Timeframes	No Areas Idle >14 Days	X			
	No Areas Near S and W Idle	X			
	No Additional TS Recommended	X			
Equipment Bridges	Fabric and Sideboards Intact	X			
	Equipment Gates Installed	X			
	Free of Sediment	X			
	No Maintenance Recommended	X			
Streams and Wetlands	Equipment Bridge Installed (S)	X			Impacts to Streams and Wetlands remained extremely limited. Test holes had previously been excavated in Wetlands (see 05/25 observations). Sheet piling had been installed in numerous wetlands. All pipeline activity thus far has occurred on timber matting and equipment bridges. **Minor turbidity observed in Stream C15-122-S1 near Greensburg Park was determined not a result of Nexus activity due to presence of turbid water upstream.
	Filter Fabric and Sideboards	X			
	Timber Mats Utilized (W)	X			
	Equipment Gates Re-installed	X			
	E/SCDs Installed and Functional	X			
	No Additional SCD Recommended	X			
	No Turbidity or Sedimentation	X			
Impacts Avoided	X				
General R/W	Good Housekeeping	X			Topsoil segregation and grading previously completed. Dewatering activities were occurring through filter bags and straw bale/filter fabric dewatering structures. Pumps and fuel cans were stored in secondary containment near environmental resources. Waterbars with sumps and J-hooks were installed and functioning. Signage remained installed and was properly visible.
	Topsoil Segregated	X			
	E/SCD Functional	X			
	No SCD Maintenance Needed		X		
	Proper Dewatering	X			
	Water Bars Installed	X			
	RUMA Signage Installed	X			
	S&W Signage Installed	X			
Refueling Signage Installed	X				
Mainline Welding and Bending	S&W Impacts Avoided	X			Good housekeeping was noted in regard to sandblast and coating materials. No sandblast and coating material was observed left on ROW in areas where welding had previously been completed.
	Timber Matting Utilized	X			
	Entrances Topdressed		X		
	Street Cleaning Evident	X			
	Cleanup of Sandblast Material	X			
	Coating Material removed from RW	X			

BMP: Best Management Practice **CWC:** Concrete Wash Containment **DB:** Drivable Berm **EB:** Equipment Bridge **ECM:** Erosion Control Matting **EG:** Equipment Gate **E/SCD:** Erosion/Sediment Control Device **FS:** Filter Sock **GH:** Good Housekeeping **GR:** General Recommendation **H/SR:** Hard/Soft Restoration **IP:** Inlet Protection **MD:** Minimized Disturbance **PRT:** Potential Roost Tree **RCE:** Rock Construction Entrance **S:** Stream **SB:** Straw Bale **SF:** Silt Fence **TM:** Timber Mat **TP:** Trench Plug **TS:** Temporary Stabilization **VB:** Vegetated Buffer **W:** Wetland **WB:** Water Bar **WSC:** Wet-saw Slurry Containment

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Key Observations: *1. Erosion/sediment control device maintenance required at several locations throughout the City of Green.

**2. Turbidity observed in Stream C15-122-S1 near Greensburg Park due to upstream impairments.

Notes: Approximately 0.92 inches of rain fell within the preceding 24 hours of the site visit.

A full site walkthrough was performed with Randy Burke (Nexus). The entire project area within the City of Green was observed except the ROW between Massillon Rd and the eastern Koons Rd crossing due to X-Ray and sheet piling installation activity occurring in the area.

Grading activities were in progress between Killinger Rd and the HDD entry side of Nimisila Reservoir.

Sheet piling installation was ongoing in Wetland B15-128 north of Killinger Rd (approximately ½ done). Crews were also installing sheet piling in Wetland C15-120 west of Massillon Rd during the site visit. Sheet piling had been previously installed in Wetland A14-122 between Comet and S Main.

- Timber matting was utilized for equipment travel.
- Minimal to no impacts were noted in Wetlands during this activity.

Crews were installing a well point system in Wetland A15-71 between Mayfair Rd and the railroad tracks during the site visit (west side of tracks). A well point system was previously installed in Wetland A15-71 between the railroad tracks and Cain St (east side of tracks).

- Well point systems had been installed near the railroad tracks for the bore under the railroad. Dewatering was active during the visit into filter bags and straw bale/filter fabric dewatering structures. Water flowing out of dewatering structures was clear and free of sediment.
- All pumps and fuel cans were stored in secondary containment near environmental resources.

Road boring under I-77 was in progress during the site visit with less than 100 feet to go.

- Bore guide made it to the bore exit pit west of I-77 indicating near completion.
- Crews were removing bore tracks on the east side of I-77 at the time of the walkthrough.
- No impacts to Wetland A15-90 west of I-77 were observed.

A welding crew was active west of I-77 in the ROW between Wetland A15-91 and Wetland C15-104.

- All activity was occurring on timber matting.
- No impacts to Stream A15-91-S1 or either Wetland was observed.

X-Ray activity was observed between the eastern Koons Rd crossing and Massillon Rd.

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HDD reaming was active under Nimisila Reservoir during the site visit.

- No drilling fluids/returns were observed near the HDD exit pit west of Christman Rd.
- Timber matting was installed around the HDD entry area for equipment travel.
- Tanker trucks were continuously hauling excess drilling fluids for disposal in a Type II landfill according to Randy Burke.
- At the current pace of approximately 400 feet per day, the HDD reaming and pipe pullback was expected to be finished in about 5 days.

Welding of Nimisila HDD bore pipe was in progress near the staging area between Christman Rd and Comet Rd during the site visit. Sandblast and pipe coating activities were also in progress.

- Containment and cleanup of sandblast material was evident.
- Good housekeeping was also observed around pipe coating activities.

No hydrotest water discharges are expected in the City of Green with the exception of the Nimisila Reservoir HDD string (approximately 75,000 gallons). The nearest significant hydrotest water discharge for the pipeline is expected near Van Buren Rd outside of the City limits according to Randy Burke.

Impacts to Streams and Wetlands throughout the City of Green remained minimal.

- Impacts to Wetland A14-112 near Arlington Rd remained minimal upon completion of the road bore activity. Topsoil had been segregated and stored separately.
- Test hole excavation had previously occurred in several wetlands along the ROW (see 05/25 observations).
- Sediment was observed in Wetland A17-5 west of Thursby Rd but all waterbars were intact, which indicates sediment was unlikely to be from Nexus activities.
- All remaining streams and wetlands remained avoided. Pipe welding and bending was observed in wetlands and adjacent to streams as expected. Good containment and cleanup of sandblast material was noted.
- Topsoil is to be segregated in streams and wetlands during pipe installation as opposed to ahead of time, limiting the duration of disturbance.
- A spill kit was staged along Nimisila Creek.
- Equipment bridges and timber matting continues to be utilized for equipment travel with equipment gates installed or staged for reinstallation as needed.
- Sediment control devices remained installed and functional at all stream and wetland boundaries as needed.

Waterbars and drivable berms had been installed as needed along slopes and at stream and wetland boundaries as needed.

- Sumps and silt fence j-hooks had been installed at the low end of the waterbars to treat stormwater prior to it leaving the ROW. Sumps and j-hooks were mostly functional and maintenance was ongoing as needed following the rain event.

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Turtle Exclusion Fencing remained installed in Spotted Turtle Exclusion Areas.

- Wire fencing was utilized in areas of water flow to prevent flooding issues.
- Silt fencing had proper ground contact as needed.
- No turtles were found during Turtle Exclusion Surveys per Randy Burke (Nexus).

Street cleaning was underway on Wise Rd and Arlington Rd during the site visit. Regular street cleaning was evident throughout the entire City of Green and no sediment track out onto roadways was observed at the time of the site visit. Additional gravel topdressing of construction entrances can help prevent sediment track out onto roadways and should be considered throughout construction.

*1. Sediment control maintenance was required at several locations throughout the City of Green following the previous night's rain event of nearly 1 inch. Randy Burke notified Nexus EIs during the site walkthrough and required maintenance was ongoing the same day.

- Damaged silt fence on the south side of the ROW at Mile Post 38.5
- Overtopped silt fence on the south side of the ROW near Mile Post 38.6
- Off-ROW stormwater runoff and overtopped silt fence on the north side of the ROW at Mile Post 40.4
- Silt fence and waterbar maintenance on the south side of the ROW at Mile Post 40.5
- Silt fence maintenance and sediment cleanup on the south side of the ROW at Mile Post 41.4
- Overtopped silt fence on the north side of the ROW at Mile Post 41.6

**2. Minor turbidity was observed in Stream C15-122-S1 near Greensburg Park. Turbidity was observed upstream of the Nexus ROW and is therefore not assumed to be a result of Nexus activity.

General environmental observations from the site visit:

- Welding activity was observed sporadically throughout the City of Green. The majority of mainline welding and bending appeared completed.
- Regular street cleaning was evident and active. Additional gravel topdressing at construction entrances can help prevent sediment track out onto the roadways.
- Silt fence and/or Belted Silt Retention Fence (reinforced silt fence) appeared to remain properly installed and functional along wetland and stream boundaries, within residential areas, and downslope of several agricultural fields. Maintenance of erosion/sediment control devices was ongoing during the site visit.
- Timber mats remain installed at the equipment crossing locations of streams and wetlands. Temporary equipment gates were observed at stream and wetland crossings as needed. Signage also remained installed at the wetlands and streams which included refueling guidance due to the presence of environmental resources.

Overall, our observations were satisfactory related to industry standards.