

February 6, 2020

P.O. Box 1065 Charlottesville, VA 22902 (434) 971-1553 www.wildvirginia.org

David Paylor Director, Virginia Department of Environmental Quality david.paylor@deq.virginia.gov Sent Via Email

Re: Enforcement of Consent Decree on Mountain Valley Pipeline and Assessment of Stipulated Penalties

Dear Director Paylor:

Board of Directors:

Bette Dzamba

Sarah Fromme

Katie Keller

Leigh Kirchner

David Sellers

Jamie Trost

Ryan Wagener

Elizabeth Williams

Reports prepared by inspectors with the Department of Environmental Quality (DEQ) document a shocking continuance of violations by Mountain Valley Pipeline, LLC (Mountain Valley) since the court approved a consent decree in December 2019. Wild Virginia calls on DEQ to aggressively enforce the provisions of the decree and/or to disclose any enforcement actions taken in response to Mountain Valley's violations that have occurred since September 18, 2019. Under the decree, stipulated penalties should be collected when violations occur and we assert that these must be assessed promptly, in every appropriate case, or any deterrence value of these provisions will be negated.

As of the date of this letter, we have seen no evidence that DEQ has acted to ensure the stipulated penalty provisions of the decree are enforced, despite the clear evidence of violations shown in the agency's own reports. If penalties have been assessed and other measures taken to force compliance, information about these matters should be revealed to the public on DEQ's web site and through public announcements.

Strong and prompt action to make the company abide by its commitments is critical, especially during this period when no active construction is supposed to be occurring on the pipeline project. If construction is allowed to proceed in the future, the threat to state waters and property owners remains dire and you must insist on all necessary measures by Mountain Valley now to avert future damages like those already imposed on our environment and the public.

In our comments on the proposed decree, Wild Virginia asserted that Mountain Valley had shown itself both unable and unwilling to meet requirements to protect state waters. We believe that, without a systematic review of past failures and both new designs to address technical shortcomings revealed in the past and changes to the company's protocols to ensure approved plans are faithfully implemented, violations are certain to continue. The evidence from the most recent state inspections seems to support the contentions we made.

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Mountain Valley's violations during a time when its sites are mostly dormant1 are particularly inexcusable. In this period, all of the company's efforts should be devoted to implementing environmental protection measures and yet the same kinds of problems that occurred on a frequent basis throughout the eighteen-month period before the decree was proposed are still occurring, though less often. The failure to install or correctly implement or maintain pollution control measures shows the company is not doing what is necessary to meet its obligations. Further, the failure of measures installed in accordance with approved plans shows that in some circumstances Mountain Valley is unable to protect our waters, even when it abides by those plans. Both types of failures must be addressed through aggressive enforcement by DEQ now.

Consent Decree Requirements

The consent decree, which was approved by the Circuit Court of Henrico County on December 11, 2019, states that "MVP *shall* be liable for stipulated penalties to the Plaintiffs for violations of this Consent Decree as specified below, unless excused under Section VI (Force Majeure)." Decree at V.(b) (emphasis added). The specific conditions that qualify for imposition of stipulated penalties, include but are not limited to circumstances when there is a "failure to properly install, repair, or maintain erosion and sediment controls, post-construction stormwater management BMPs, or other pollution prevention measures in accordance with" standards and specifications and site-specific plans, Decree at V.(b)(2); where failures result "in visible and measurable sediment deposition off of the right of way onto adjacent property," Decree at V.(b)(3); and when there is a "failure to maintain any ESC Measure in Need of Routine Maintenance" within specified timeframes, Decree at V.(b)(4). As described below, we assert that each of these types of violations are shown by DEQ reports.

In addition to the requirements for Mountain Valley to take specific pollution-control measures, the decree includes deadlines for submittal of a number of plans and documents. We have seen no evidence as to whether these conditions of the decree have been met. We believe it is vital for DEQ to report to the public on the status of the company's compliance with each of these requirements and we ask that an accounting of these issues be made to the public immediately.

These conditions include: requirements that Mountain Valley confirm that the violations alleged in the State's lawsuit have been corrected, Decree at IV.(a); that environmental auditors with specified qualifications be retained by Mountain Valley, Decree at IV.(b); that additional resources be made available to repair ineffective erosion and sediment control measures where necessary, Decree at IV.(d); and that a system be established to ensure that necessary maintenance actions will be taken in a timely manner, Decree at IV.(e). Deadlines for each of these requirements have passed and the public needs to know whether they have been met. Further, the actual submittals made by Mountain Valley in response to these conditions must be made available, along with DEQ's responses or approvals of the submittals, preferably on DEQ's website.

During the period addressed in this letter, 57 of the reports show "stage of construction" as "dormant," and on every report from October 15 through December 20 the status is listed as dormant.

Violations Documented

The consent decree "resolves the Plaintiffs' civil claims against MVP for the violations alleged in the Complaint, as well as any additional alleged violations that may have occurred through September 18, 2019." Decree at VIII.(a). Therefore, further enforcement actions and stipulated penalties should address any violations occurring after that date.

We have reviewed sixty-seven inspection reports acquired from DEQ's website at the page entitled <u>Multi-faceted Inspection for Oversight of Pipeline Projects</u>. These reports cover the period from September 19 through December 20, 2019. Each report includes answers to the three questions shown below.

1. Are controls installed and implemented in accordance with the approved erosion and sediment control plan and stormwater management plans?

In response to this question, three reports answer "no" and include specific descriptions where controls were not installed or implemented as required. These reports covered inspections on October 29, October 30, and December 2, 2019. It is important to note that each report listed represents multiple sites where required ESC measures were not installed or implemented correctly, if at all. The reports from October 29 and 30 present extraordinary and inexcusable levels of failure in response to this and the other two questions and reveal the overwhelming need for strong enforcement.

- October 29, Spread I (STA 15113+00 15221+11) The report describes numerous failures including at least eleven sites where water bars that are supposed to channel water off the right of way and through measures to control the discharge of sediments were incorrectly constructed or installed.
- October 30, Spread I (STA 14845+68 14928+52) The report describes numerous instances where control structures were "bypassed" with at least six more instances where the water bars or the "end treatments" were installed incorrectly.

There are other instances where DEQ inspectors answered "yes" to this question, indicating that measures had been correctly implemented, but where the narrative descriptions and photographs appear to show failures to properly install or implement controls. Examples include:

- October 7, Spread I (H602, STA 15941+75 16027+46) The report states that stabilization is needed on both sides of a stream crossing at waterbody S-OO1. A failure of this type should not be characterized merely as a maintenance problem but is an instance where the proper measures have, apparently, simply not been taken. The photograph (Figure 3) in this report shows approaches to the stream and there appears to be no visible evidence that stabilization has been attempted, despite the fact that such measures are to be taken within a short time after active work is stopped at a site. Of course, this is particularly important adjacent to waterbodies.
- December 6, Spread I (STA 14831+61 14981+55, ATWS 540/541, 377/378, 1364, 380) The report shows a "travel lane" where stabilization is needed. Again, the establishment of stabilization is to begin very soon after active construction ceases at a site. This site was dormant on the inspection date and must have been so for many weeks by that time. While

we recognize that soil binders or seed could have been applied at this site at some time, there is no evidence of any effective stabilization efforts here. A photograph (Fig. 3) shows the area has significant rill formation due to erosion, with some areas approaching or exceeding a depth characteristic of gully erosion. Even if attempts at stabilization had been made at some time, surely the approved plans require renewed efforts where those measures have clearly failed and resulted in damage.

We assert that, in every case where ESC and stormwater control measures were not installed or were not in conformance with approved plans, these represent violations that must be addressed through enforcement actions and stipulated penalties. Therefore, we ask that DEQ inform us and the public whether penalties have been or will be assessed for all of the specific instances where the inspection reports show this class of failure, regardless of the answer given for question 1.

It is important to note that Mountain Valley's failures to install control measures, as shown in these recent reports, reflects the same behaviors that DEQ inspectors have documented throughout the life of the project. Of the 354 DEQ reports where this question was answered, inspectors answered "no" in 47 instances (13% of the time).

Clearly all of DEQ's actions to date, including a stop work order, the lawsuit, and a decree including a 2.15 million dollar fine have not yet convinced Mountain Valley to change its ways. You must act now. If the company is allowed to resume construction at some point, there is a grave threat that the frequency of violations will again increase and so will the degradation of our resources. And, even if construction does not resume, these scars on our mountain slopes and across farmland will never heal without diligent efforts by Mountain Valley - a level of diligence that has been lacking thus far.

2. Are all control measures properly maintained in effective operating condition in accordance with good engineering practices and, where applicable, manufacturer specifications?

In response to this question, there are nineteen reports in the specified period on which the answer is "no." Thus, 28% of these inspection reports state that measures were not "properly maintained in effective condition." This is an astounding finding that is completely inexcusable for a project that has been ongoing for nearly two years. Again, the fact that construction was not underway during this period and that Mountain Valley's efforts were to be solely concentrated on maintenance, repair, and upgrades to pollution control measures seems to indicate that the company's policies and/or resources are not adequate to meet its responsibilities.

The "no" answers to this question on nineteen reports actually represent at least 55 specific instances where Mountain Valley failed to act properly. We recognize that not every instance where maintenance needs are identified represents a violation. However, the information provided in the reports does not allow us to know whether timely maintenance was done in these cases. Please tell us whether DEQ knows if the maintenance needs were addressed by pertinent deadlines and, if so, whether those deadlines were missed and how often.

An additional point we would raise is that the DEQ inspections can only cover a limited number of sites and dates. Therefore, the failures to install, implement, or maintain ESC measures identified in reports must be only a relatively small subset of the total number of problems that

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exist, if Mountain Valley personnel fail to identify or correct these deficiencies, even if present for days or weeks, until DEQ finds them.

There is strong evidence that some of the maintenance problems DEQ identified existed for extended periods and were ignored until the agency found them. For example, on November 7 DEQ documented five separate sites in Spread I where maintenance was needed. In two of those cases, water flows had undermined perimeter sediment controls, thus eliminating their value to control sediment discharges. These two sites are shown in Figures 1 and 3 in the report and it is clear that this type of failure of the perimeter controls could only be caused by significant rainfall and runoff events. Rainfall records2 show that there were no measurable rainfall events in the five days preceding this inspection, with the most recent rain measured at only 0.79 inches on November 1, 2019. Does DEQ make efforts to ascertain how long these kinds of problems have existed when its inspectors discover them and, if not, why?

3. Areas of offsite sediment deposition were observed?

There were numerous sites for which the answer to this question was "yes," during the time period examined. The individual citations below were documented on October 29 and 30, the same days on which dozens of failures to properly install and maintain control measures were observed (both reports attached to this letter).

STA 15169+58: Sediment off ROW, controls overtopped.

STA 15169+58: Sediment off ROW, sump discharge bypassed end-treatment.

STA 15128+40: Sediment off ROW. Upslope control failure and incorrect installation of waterbar end treatments.

STA 15126+40: Sediment off ROW impacting Wetland W-A5 due to failed controls and overtopping of upslope waterbars.

STA 14897+00: Sediment off ROW. Upslope control failure and incorrect installation of waterbar at 14896+00.

STA 14904+00: Sediment off ROW due to undermined CFS.

STA 14921+60: Sediment off ROW. Controls over topped.

STA 14923+00: Sediment off ROW. Upslope waterbar failure at 14923+50.

Note that the sediment discharge at STA 15126+40 directly impacted a wetland "due to failed controls and overtopping upslope waterbars." This is among the most serious violations of the decree. It must be acknowledged though that *every* case where sediment is deposited off-site is an invasion of the property rights of landowners and represents a clear threat that the sediment will migrate to a stream or wetland in subsequent storms. Therefore, each of these events should be treated very seriously - they must not be considered as routine and minor events just because waterbodies are not immediately damaged by them.

2 These rainfall records are taken from the Roanoke Regional Airport, the station with reliable and constant records that is closest to the areas addressed here. While there can be significant differences in rainfall patterns from one area to another, especially in summer when intense and localized thunder storms occur, it is not credible to believe that there were major storm events in the areas inspected preceded the November 7 inspection and not at Roanoke.

However, Mountain Valley seems to take a lackadaisical approach to these violations, given that 62 of the 354 (18%) of all inspection reports dated 7/3/18 through 12/20/19 documented off-site sediment deposition. And of these instances numerous waterbodies were assaulted, causing habitat damage and possibly lasting impacts and violations of water quality standards. If Mountain Valley was serious about avoiding these assaults on our waters, it would have done so many months ago.

Additional Questions and Comments

We have some additional questions and concerns, as follows:

- Our review of inspection reports went only through December 20, 2019, because those listed on the agency's web page stop at the date. Have there been more recent inspections? If so, we think it is important for you to make those reports available as soon as possible. If not, why not? Every rainfall event is an opportunity for pollution discharges from disturbed sites, especially in some of the landscapes this pipeline path crosses. The record shows that frequent inspections must remain a high priority for the protection of many of our streams, including some of the most sensitive and valuable aquatic resources in the state.
- We believe that, given that DEQ's resources will always be limited and that the project is so extensive, DEQ must take advantage of all valid and reliable sources of evidence in regulation the pipeline. The Federal Energy Regulatory Commission (FERC) and Mountain Valley both produce reports on activities and findings to cover each week and these reports present both narrative and photographic evidence. The inspectors who produce those reports are supposed to be trained and their findings and evidence reliable.

We have reviewed nearly all of those FERC and company reports for MVP and, without question, they reveal violations of Virginia regulations that were not discovered by DEQ inspectors. As you know, DEQ depends very heavily on permittee-reported data to take enforcement actions in relation to wastewater discharging facilities and has successfully taken enforcement actions on that basis for many years. There is no reason why the company's reports should not be used in the same fashion here.

Finally, as you know, citizens make reports that are often supported by date and time-stamped photos and, sometimes, by observations by trained and credentialed personnel. While we understand that a high standard of proof must be maintained and that not every assertion of a violation can be the basis for DEQ actions. However, we also do not believe that these sources should be dismissed out-of-hand and that, where possible, they should serve as independent pieces of evidence to supplement and bolster DEQ's findings. Citizen testimony and proof can be validly used. As you must know, photographs may well be valid evidence in court and in administrative enforcement cases, as long as they can be verified by testimony.

What is DEQ's policy on using these other sources of evidence? We strongly urge that all credible and verifiable sources be used.

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Conclusion

The Mountain Valley Pipeline has been a disaster for the waterbodies along its path and for the people who have borne the brunt of its impacts. The State's enforcement action sought to address the violations and one of its goals was to prevent a continuance of these problems. However, the violations continue and, unless you act quickly and decisively, we fear the result will be dire. The number of violations has decreased during this lull in construction, but all evidence suggests that Mountain Valley will continue its reckless, headlong rush to finish construction, if given the go-ahead by FERC and not stopped by the courts.

The history of this project tells us that we cannot rely on the pipeline company to make environmental and public protection a priority. In August of 2019, when DEQ ordered work stopped on a portion of the MVP, you said you were "appalled" by your inspectors' findings and by the fact that "construction priorities and deadline pressures would ever rise above proper and appropriate use of erosion control measures." Jeff Sturgeon, Roanoke Times, *Regulators stop work on 2 miles of Mountain Valley Pipeline in Montgomery County*, August 2, 2019.

We found your apparent shock at Mountain Valley's actions and attitude at that time puzzling, because it has been clear from the first day of construction that protection of the environment and communities was far down the company's list of priorities. If DEQ fails to take aggressive enforcement action, we are confident that you and we will see many more appalling situations. You must act. We look forward to hearing from you and to seeing the Department's enforcement actions.

Sincerely,

/s/ David Sligh
David Sligh
Conservation Director



FIELD INSPECTION

Project Name:	Mountain Valley Pipeline	Inspector:	Marshall Willis	
Inspection Date:	Tuesday, October 29, 2019 Project Contact:		Brian Clauto, Cory Chalmers	
Spread I: Pittsylvania County	STA 15113+00 - 15221+11	Weather (Wet/Dry/Rain):	Wet	

STAGE OF CONSTRUCTION: (Check all that apply)						
	learing Rough Grading Trench Excavation				Pipe Assembly, Testing & Installation	
П	Backfilling and Grade Restoration Final Grading & Stabilizati	ion			\boxtimes	Other: Dormant
		Yes	No	N/A		
1	Are controls installed and implemented in accordance with the approved erosion and sediment control plan and stormwater management plans?					
2	Are all control measures properly maintained in effective operating condition in accordance with good engineering practices and, where applicable, manufacturer specifications?		\boxtimes			
3	Areas of offsite sediment deposition were observed?					
Comments: Inspected the following resources: S-C7, S-H11, S-H11-Braid, S-A6, W-A5 and S-A5. STA 15172+00: End-treatment bypassed. CFS outlet higher than waterbar. STA 15271+50 to 15169+58: Waterbar maintenance needed. STA 15169+58: Sediment off ROW, controls overtopped. STA 15169+58: CFS maintenance needed. STA 15169+58: Sediment off ROW, sump discharge bypassed end-treatment. STA 15169+58: End-treatment bypassed, sump discharge bypasses CFS. STA 15162+25: CFS maintenance needed. STA 15162+00: P1 undermined. STA 15161+00: CFS maintenance needed. STA 15161+00: CFS maintenance needed. STA 15161+00: SSF maintenance needed. STA 15135+00: End-treatment bypassed. Waterbar lower than end-treatment. STA 15135+00: End-treatment bypassed. Waterbar lower than end-treatment. STA 15128+40: Sediment off ROW. STA 15128+40: Sediment off ROW. STA 15128+65: CFS maintenance needed. STA 15128+65: CFS maintenance needed. STA 15128+60: Sediment off ROW. Upslope control failure and incorrect installation of waterbar end treatments. STA 15128+0: Sediment off ROW. Upslope control failure and incorrect installation of waterbar end treatments. STA 15126+00: Sediment off ROW impacting Wetland W-A5 due to failed controls and overtopping of upslope waterbars. STA 15126+00: CFS maintenance needed. STA 15126+00: CFS maintenance needed. STA 15126+00: End-treatment bypassed. Waterbar lower than end-treatment. STA 15126+00: End-treatment bypassed. Waterbar lower than end-treatment. STA 15125+00: End-treatment bypassed. Waterbar lower than end-treatment. STA 15126+00: End-treatment bypassed. Waterbar lower than end-treatment. STA 15126+00: End-treatment bypassed. Waterbar lower than end-treatment. STA 15127+00: Waterbar lower than end-treatment. STA 15127+00: Waterbar lower than end-treatment. STA 15127+00: Waterbar lower than end-treatment.						



Deadline: Within 24-hr notification

The recommended corrective action deadline date applies to all conditions noted on this report unless otherwise noted. If listed condition(s) currently constitute non-compliance and/or corrective actions are not completed by the deadline, other enforcement actions may be issued to the entity responsible for ensuring compliance on the above project.

Inspector Signature: _

Date: 10/29/2019



Fig. 1: **STA 15172+00** – End-treatment bypassed. CFS outlet higher than waterbar. Maintenance needed.



Fig. 3: **STA 15169+58** – Sediment off ROW. Controls overtopped.



Fig. 2: **STA 15171+50 to 15169+58** – Waterbar maintenance needed.



Fig. 4: **STA 15169+58** – CFS overtopped. Maintenance needed.





Project Name: Mountain Valley Pipeline <u>Date</u>: Tuesday, October 29, 2019

Fig. 5: **STA 15169+58** – Sediment off ROW. Sump discharges between CFS and SSF.



Fig. 6: **STA 15169+58** – CFS maintenance needed. Sump discharge bypasses CFS end-treatment.



Fig. 7: STA 15162+25 - CFS maintenance needed.



Fig. 8: **STA 15162+00** – P1 undermined from channelized flow.





Fig. 9: **STA 15161+00** – CFS undermined.



Fig. 10: **STA 15157+00** – CFS end-treatment bypassed. Maintenance needed.



Fig. 11: **STA 15142+00** – SSF undermined.







Fig. 13: **STA 15134+50** – CFS end-treatment bypassed. Maintenance needed. Waterbar lower than CFS outlet.



Fig. 15: **STA 15128+65** – CFS undermined. Maintenance needed.



Fig. 14: **STA 15128+71** – Waterbar does not discharge off ROW. Maintenance needed.



Fig. 16: **STA 15128+40** – Sediment off ROW due to upslope control failure and incorrect installation of waterbar end treatments.





Fig. 17: **STA 15127+20** – P1 mainten ance needed.



Fig. 18: **Wetland W-A5** – Sediment off ROW impacting wetland W-A5 due to control failure and incorrect installation of upslope controls.



Fig. 19: **STA 15126+00** – CFS undermined.











FIELD INSPECTION

Project Name:	Mountain Valley Pipeline	Inspector:	Marshall Willis		
Inspection Date:	te: Wednesday, October 30, 2019 Project C		Brian Clauto, Cory Chalmers		
Spread I: Franklin County	STA 14845+68 – 14928+52	Weather (Wet/Dry/Rain):	Rainy		

STAGE OF CONSTRUCTION: (Check all that apply)						
	Clearing Rough Grading Trench Excavation			Pipe Assembly, Testing & Installation		
	Backfilling and Grade Restoration Final Grading & Stabilization	Final Grading & Stabilization			Other: Dormant	
		Yes	No	N/A		
1	Are controls installed and implemented in accordance with the approved erosion and sediment control plan and stormwater management plans?					
2	Are all control measures properly maintained in effective operating condition in accordance with good engineering practices and, where applicable, manufacturer specifications?					
3	Areas of offsite sediment deposition were observed?					
<u>C</u>	omments: Inspected the following resources: S-H17, S-A7, S-SS8, S-CD8,	S-AB	8, S-	G16 a	nd S-E	DD3.
R	STA 14856+08: CFS maintenance needed. End-treatment undermined. STA 14856+50: Waterbar lower than end-treatment. WB discharge unable to get off ROW. STA 14867+00: End-treatment bypassed, sump discharge bypasses CFS. STA 14869+69: CFS maintenance needed. End-treatment undermined. STA 14869+69: CFS maintenance needed. CFS undermined. STA 14872+00: Sump maintenance needed. STA 14872+50: End-treatment discharges onto ROW. STA 14872+50: End-treatment discharges onto ROW. STA 14880+00: Sump maintenance needed. STA 14881+00: Stabilize slope/repair erosion adjacent to Stream S-CD8. STA 14881+00: P1 maintenance needed adjacent to Stream S-CD8. STA 14881+00: CFS undermined. End-treatment discharges onto ROW. STA 14888+10: Sump maintenance needed. STA 14888+10: CFS undermined. End-treatment discharges onto ROW. STA 14888+10: CFS maintenance needed adjacent to Stream S-AB8. STA 14888+60: P1 maintenance needed adjacent to Stream S-AB8. STA 14888+60: P1 maintenance needed adjacent to Stream S-AB8. STA 14888+75: Stabilize slope/repair erosion adjacent to Stream S-AB8. STA 14896+00: Waterbar does not extend length of ROW. Discharge bypasses CFS. WB discharge unable to get off ROW. STA 14897+00: Sediment off ROW. Upslope control failure and incorrect installation of waterbar at 14896+00. STA 14904+00: CFS undermined. STA 14904+00: Sediment off ROW due to undermined CFS. STA 14916+26: Clean sediment off Stream S-G16 bridge. Stabilize slope and repair erosion on adjacent slope. STA 14922+50: Waterbar maintenance needed. STA 14923+50: Waterbar maintenance needed. STA 14923+50: Waterbar maintenance needed. STA 14923+50: Waterbar maintenance needed.					



Deadline: Within 24-hr notification

The recommended corrective action deadline date applies to all conditions noted on this report unless otherwise noted. If listed condition(s) currently constitute non-compliance and/or corrective actions are not completed by the deadline, other enforcement actions may be issued to the entity responsible for ensuring compliance on the above project.

Inspector Signature:

Date: 10/30/2019



Project Name: Mountain Valley Pipeline

Fig. 1: **STA 14856+08** – End-treatment undermined. Maintenance needed.



Fig. 2: **STA 14856+50** – Waterbar lower than CFS end-treatment. Discharge unable to get off ROW.



Fig. 3: **STA 14867+00** – End-treatment bypassed. Maintenance needed.



Fig. 4: **STA 14869+60** – End-treatment undermined. Maintenance needed.





Project Name: Mountain Valley Pipeline

Date: Wednesday, October 30, 2019

Fig. 6: **STA 14872+00** – Sump maintenance needed.

Fig. 5: STA 14869+69 – CFS undermined. Maintenance needed.

② 256°W (T) ③ 36°58'15"N, 79°39'27"W±16.4ft ▲ 861ft

(15 tundermined) 30.0ct 2019, 10°45-45

Fig. 7: **STA 14872+50** – End-treatment discharges onto ROW. Maintenance needed.



Fig. 8: **STA 14880+00** – Sump maintenance needed.





Project Name: Mountain Valley Pipeline

Fig. 9: STA 14881+00 – Stabilize slope/repair erosion adjacent to S-CD8.

③ 309°NW (T) ⑤ 36°58'13"N, 79°39'13"W ±16.4ft ▲ 912ft

Fig. 11: **STA 14882+00** – CFS undermined. End-treatment discharges onto ROW.



Fig. 12: **STA 14888+10** – Sump maintenance needed.





Project Name: Mountain Valley Pipeline

Fig. 13: STA 14888+10 – CFS undermined. End-treatment discharges onto ROW.

© 221°SW (T) © 36°58'12"N, 79°39'5"W ±32.8ft ▲ 891ft

Fig. 14: **STA 14888+19** – CFS maintenance needed.

Fig. 15: **STA 14888+60**– P1 maintenance needed.



Fig. 16: **STA 14888+75** – Stabilize slope/repair erosion adjacent to S-AB8.





Project Name: Mountain Valley Pipeline

Date: Wednesday, October 30, 2019

Fig. 17: **STA 14896+00** – Waterbar does not extend length of ROW.

② 21°N (T) ③ 36°58′11″N, 79°38′56″W ±16.4ft ▲ 895ft

44896+00

€ 30 60 2019, 11≥1947

Fig. 19: **STA 14904+00** – CFS undermined. Maintenance



Fig. 19: **STA 14904+00** – CFS undermined. Maintenance needed.





Fig. 20: **STA 14904+00** – Sediment off ROW.

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Project Name: Mountain Valley Pipeline

Fig. 21: STA 14916+26 – Clean sediment off bridge.
Stabilize and repair slope adjacent to S-G16.

© 263°W (T)
© 36°58′6″N, 79°38′31″W ±32.8ft
A 710ft



Fig. 23: **STA 14922+50** – Waterbar maintenance needed.



Fig. 24: **STA 14922+50** – CFS undermined. Maintenance needed.





Project Name: Mountain Valley Pipeline

