



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Active and Abandoned Mine Operations

# New Hope Crushed Stone

Monthly Update

Solebury Communications Group

September 2017

Tom Wolf, Governor

Patrick McDonnell, Secretary

# September 2017 Project Status

<b>STATUS AS OF:</b>	October 5, 2017
<b>PROJECT</b>	New Hope Crushed Stone (NHCS) Quarry Reclamation and Stream Restoration
<b>START DATE</b>	Reclamation: January 29, 2016 Stream Restoration: January 29, 2016
<b>ANTICIPATED COMPLETION DATE</b>	Reclamation: March 2019 Stream Restoration: March 2019
<b>CURRENT STATUS</b>	Quarry Reclamation <span>On Schedule</span> Stream Restoration <span>On Schedule</span>

# Key Ongoing Factors

- Provisions of the January 29, 2016, letter from DEP to NHCS continue to be in effect.
  - Reclamation and stream restoration are required to be completed by March 2019.
- Reclamation and stream restoration progress reporting to DEP by the 5<sup>th</sup> of each month remains.
- Environmental Hearing Board Appeals by NHCS
  - January 29, 2016, DEP letter: Hearing held March 20, 2017. Decision anticipated later this year.
    - The EHB dismissed the NHCS appeal on September 7, 2017
  - August 26, 2016, Compliance Order: Withdrawn on August 15, 2017.
- Commonwealth Court Appeals by NHCS
  - January 29, 2016, DEP letter: EHB September 7, 2017, dismissal appeal filed on September 29, 2017.
- The July 17, 2017, drone survey of the quarry resulted in a reduced reclamation volume being moved. DEP concludes the reclamation progress is on track for completion by March 2019. This is due to:
  - NHCS has demonstrated the ability to move the necessary volumes of reclamation fill in June and July.
  - NHCS has a clear understanding of the performance expectations moving forward.
  - With the completion of the survey and staking of areas with mapping showing reclamation progress and future placement needs, reclamation work moving forward can be done more accurately and efficiently.
  - DEP will require a survey in early 2018 to serve as a benchmark for the March 2019 completion.
- The last NHCS related sinkhole was repaired on April 28, 2017.

# September 2017 Highlights

- **Settlement Negotiations.**
  - Talks between DEP and NHCS have continued.
- **An inspection occurred on September 29.**
  - Statutorily required inspection frequency is once per quarter.
  - 500,000 GPD maximum pumping continues.
  - The water level is estimated to be -45 MSL.
  - Work was observed on the stream. Matting was installed and grass was observed growing through the matting. Work on the inlet is needed to stabilize the area.
  - The crushing/screening plants were running.
  - Mining was observed on the fourth level and in the stock area.
- **Reclamation and Stream Restoration Progress**
  - **September Work Days**
    - 10 on reclamation; 14 on stream; 2 lost to inclement weather and conditions.

# September 2017 Highlights - Continued

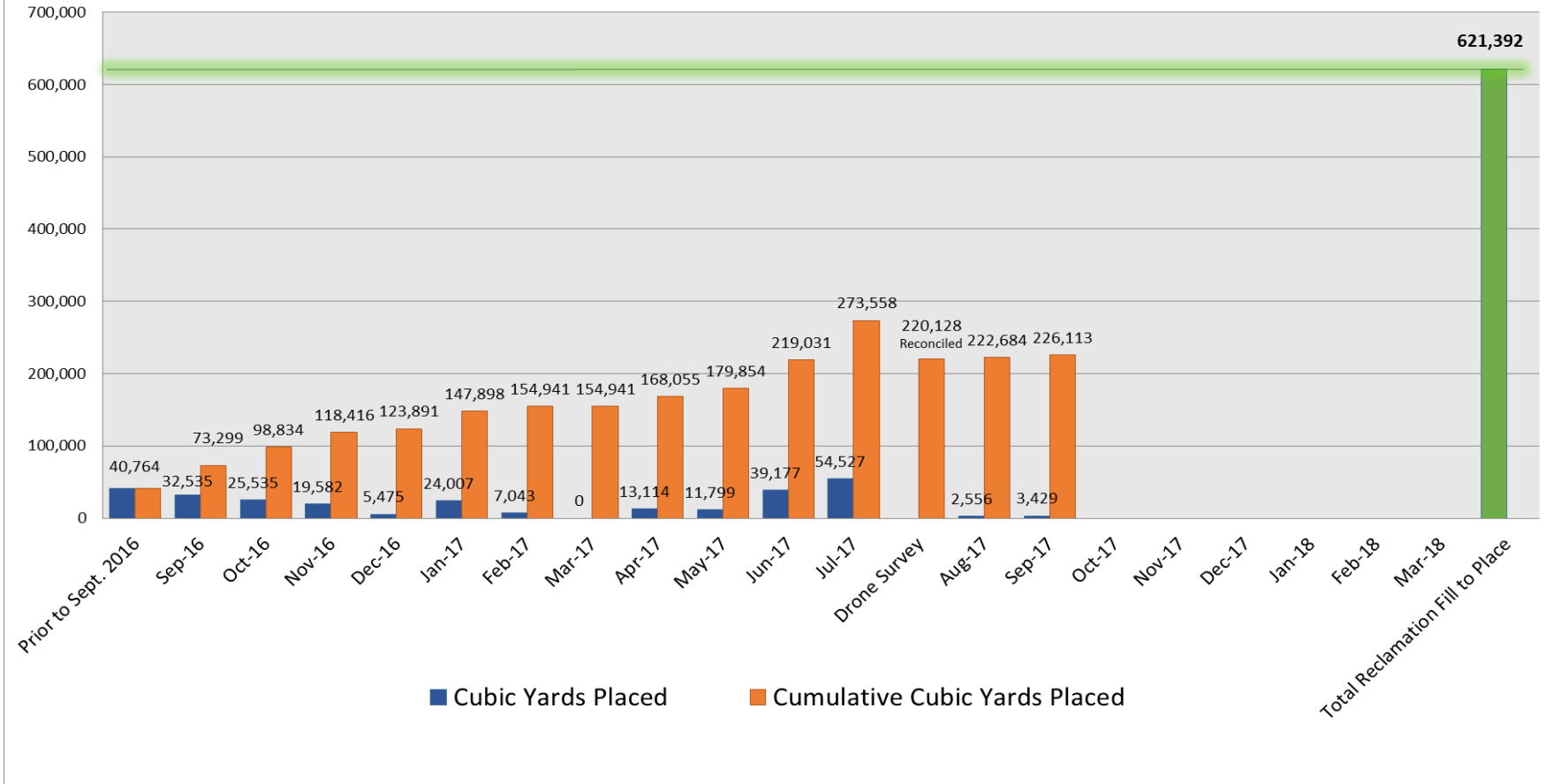
- Reclamation and Stream Restoration Progress - Continued
  - 61 truck trips were made in September with 3,429 cubic yards of overburden trucked; the total to date is 226,113 cubic yards.
    - As of the end of September 36.4% of the total reclamation material has been moved.
    - Truck trip efficiency was fairly consistent; 56.2 cubic yards per load for September as compared to 56.8 cubic yards per load in August.
    - Reclamation work included removing boulders and smoothing the slopes of the north side and placing and pushing fill on the southwest slopes.
  - Stream work was done on 14 days.
    - With DEP concurrence, stream restoration was emphasized starting in August to help insure the stream is stabilized moving forward.
    - Stream channel work including the installation of matting.
    - Work was also done on the inlet entering the quarry.
  - Highwall Reclamation Progress (New for September)
    - Total need is approximately 4,875 linear feet around the quarry (excludes pre-act areas at the southern end).
    - Total reclaimed to date is approximately 1,650 feet or 34%.
    - This statistic will be updated periodically based on having valid data.

# Monthly Progress Data

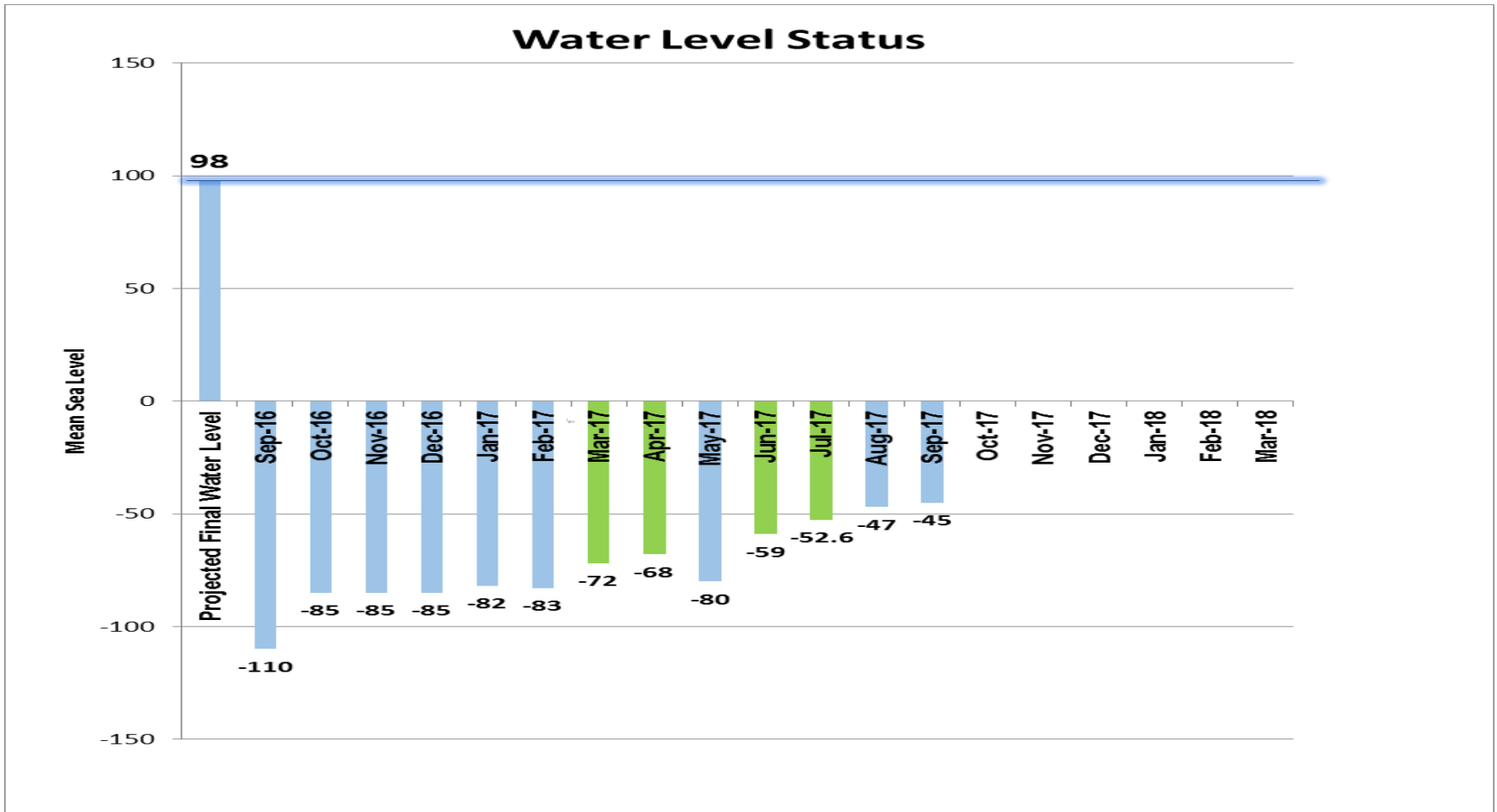
Month	Cubic Yards Placed Overburden	Cubic Yards Placed Overburden, Cumulative	Truck Loads	Reclamation Work Days	Stream Restoration Work Days	Inclement Weather Work Days Lost
Prior to Sept. 2016	40,764	40,764	237			
Sep-16	32,535	73,299	940			
Oct-16	25,535	98,834	531	15.0	6.0	0.0
Nov-16	19,582	118,416	367	5.0	13.0	2.0
Dec-16	5,475	123,891	128	2.5	0.0	15.5
Jan-17	24,007	147,898	588	16.0	0.0	1.0
Feb-17	7,043	154,941	186	8.0	0.0	4.0
Mar-17	0	154,941	0	0.0	0.0	11.0
Apr-17	13,114	168,055	365	13.0	0.0	3.0
May-17	11,799	179,854	301	9.0	1.0	4.0
Jun-17	39,177	219,031	126	0.0	6.0	2.0
Jul-17	54,527	273,558	1,103	9.0	1.0	3.0
Drone Survey		220,128				
Aug-17	2,556	222,684	45	10.5	22.5	4.0
Sep-17	3,429	226,113	61	10.0	14.0	2.0
Oct-17						
Nov-17						
Dec-17						
Jan-18						
Feb-18						
Mar-18						
<b>Total Reclamation Fill to Place</b>	<b>621,392</b>					
<b>Percentage of total placed to date</b>	<b>36.4%</b>					

# Reclamation Fill Progress

## Reclamation Fill Tracking



# Water Level Tracking



Blue bar = Estimated

Green bar = NHCS consultant, EarthRes, PE stamped reports



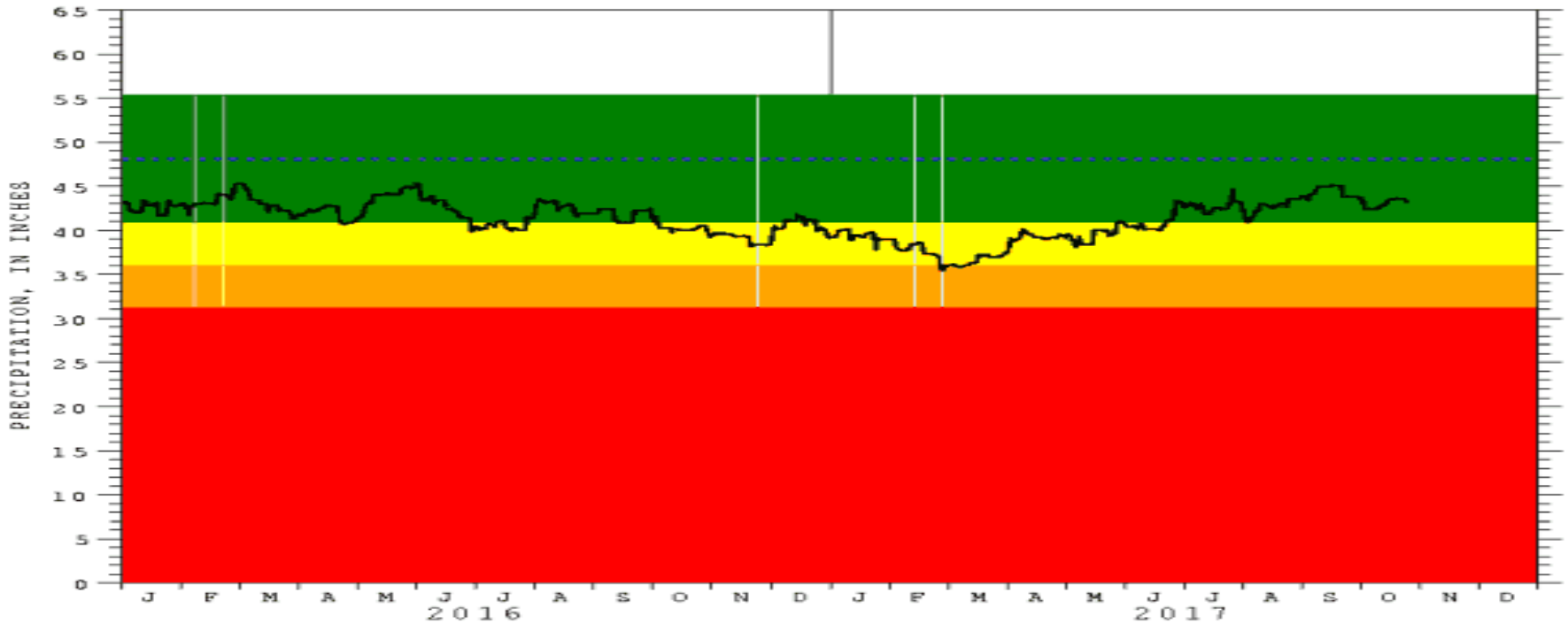
# NHCS Monitoring Well Locations



Monitoring well locations are noted by MW1 and MW2 to the right and MW8 at the top center. The fourth in the center is for the plants water use.

# Bucks County Precipitation: 2016-2017

**BUCKS COUNTY PRECIPITATION**  
 USGS PLOT OF NATIONAL WEATHER SERVICE DATA  
 MOVING 365-DAY TOTAL PRECIPITATION  
 DATE OF PLOT=10/23/17



COLORED BANDS REPRESENT DROUGHT INDICATOR CRITERIA USED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR DROUGHT MONITORING

SOLID LINE = CURRENT MOVING 365-DAY TOTAL, IN INCHES  
 DASHED LINE = MOVING AVERAGE 365-DAY TOTAL, FOR 1981-2010, MARFC 2013

GREEN (TOP)	BAND	=	15 PERCENT ABOVE TO 15 PERCENT BELOW AVERAGE (NORMAL)
YELLOW	BAND	=	25 TO 35 PERCENT BELOW AVERAGE (WATCH)
ORANGE	BAND	=	35 TO 50 PERCENT BELOW AVERAGE (WARNING)
RED (BOTTOM)	BAND	=	GREATER THAN 50 PERCENT BELOW AVERAGE (EMERGENCY)

# NHCS Bench Levels

- Bench 2 60' MSL
- Bench 3 10' MSL
- Bench 4 -35 MSL
- Bench 5 -85 MSL
- Bench 6 -120 MSL



# Establishing Photo Vantage Points

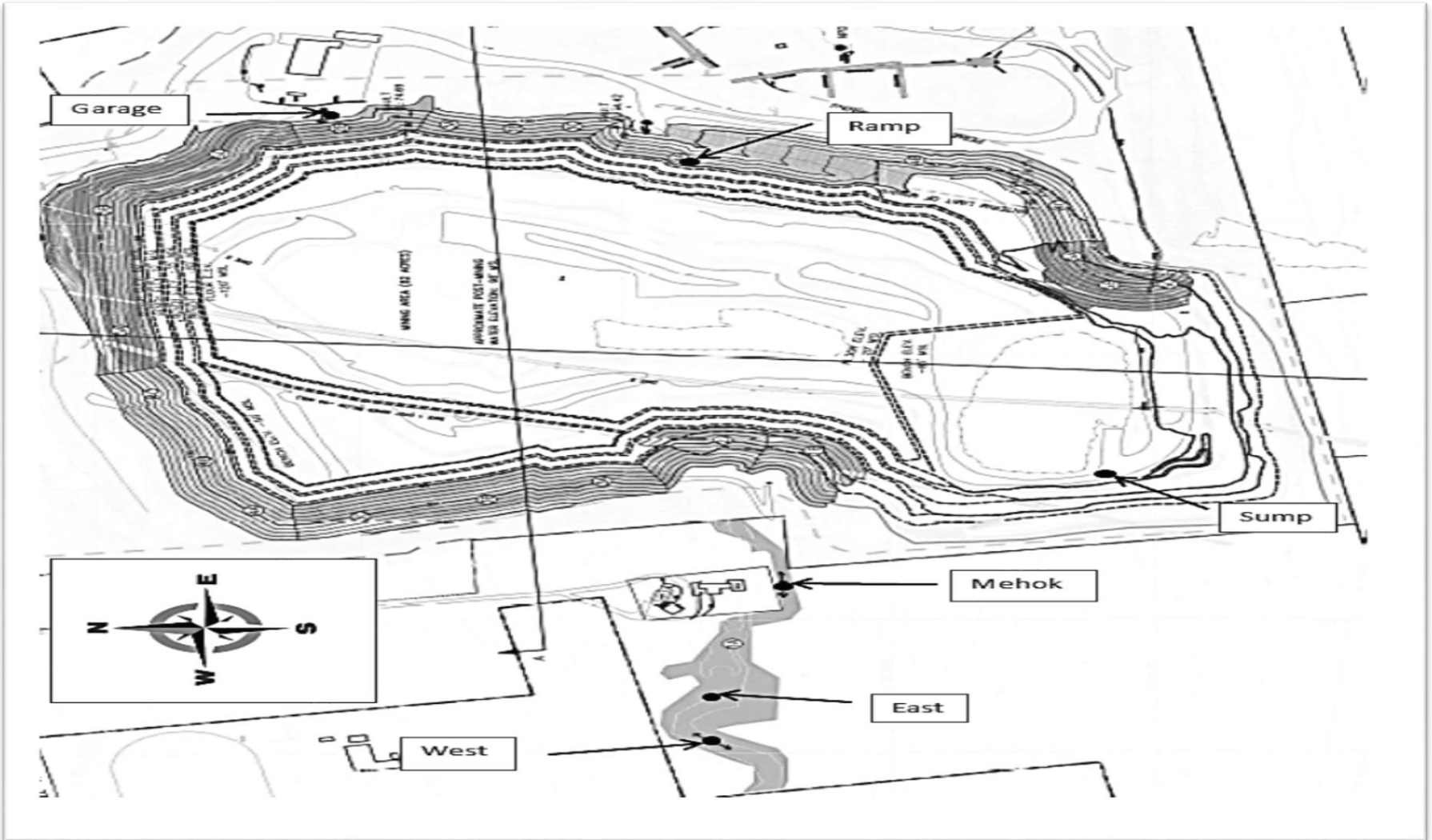
To the extent possible with changing conditions at the quarry, photos will be taken from these geographic locations during each inspection.

*Please refer to the map on the next slide.*

- West looking east, west
- East looking east, west
- Mehok looking east, west
- Sump (Location now underwater)
- Ramp looking south, west
- Garage looking north, south



# Photo Vantage Points



# Sump Area



Looking west.



# North and East Wall



9/7/17

Taken from the ramp area.



9/29/17



# North and West



9/7/17

Taken from the ramp area.



9/29/17



# Stream Inlet to Quarry



9/7/17



9/19/17

# Stream Towards Quarry



9/7/17



9/19/17



# Stream West From Mehok Residence



9/7/17



9/19/17

# Stream West



**9/7/17**



**9/29/17**





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# For More Information

Monthly Updates, Inspection Reports,  
Communications and more, posted as available.

Please visit: [www.dep.pa.gov](http://www.dep.pa.gov)

Regional Resources > Southeast Region > Community Information

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