Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0060917**
Facility Type	**Non-Municipal**	APS ID	**983198**
Major / Minor	**Minor**	Authorization ID	**1453986**

Applicant and Facility Information

Applicant Name	**Country Crest MHP LLC**	Facility Name	**Country Crest MHP**
Applicant Address	PO Box 189	Facility Address	Route 29
	Moscow, PA 18444-0189		Hunlock Creek, PA 18621
Applicant Contact	Tia Spangenberg, Owner	Facility Contact	Tia Spangenberg, Owner
Applicant Phone	(570) 702-6171	Facility Phone	(570) 702-6171
Client ID	346937	Site ID	240079
Ch 94 Load Status	Not Overloaded	Municipality	Lehman Township
Connection Status	-	County	Luzerne
Date Application Received	September 1, 2023	EPA Waived?	Yes
Date Application Accepted	March 14, 2024	If No, Reason	-

Purpose of Application: Renewal of NPDES permit for discharge of treated sewage.

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge up to 0.0144 MGD of treated sewage into Unnamed Tributary 28314 to Hunlock Creek, a Cold-Water Fishery, Migratory Fish (CWF, MF) receiving stream in State Water Plan Basin 5-B (Wapwallopen Creeks). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use. This stream segment is not designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

There was a discrepancy and lack of information in the NPDES Permit renewal application in regard to the Outfall location and the receiving stream. Both the submitted General Information Form and NPDES Permit Application incorrectly lists the Outfall 001 location as 41˚ 15' 52.36", -76˚ **4.37' 65".** These coordinates cannot exist. The NPDES Permit Application also identified the receiving stream as "Unnamed Tributary of Hunlock Creek". There are two Unnamed Tributaries to Hunlock Creek in the area of the facility. The permittee and their consultant were asked for clarification via email on February 25, 2025. No response was received even after numerous follow up emails on May 14, 2025, May 27, 2025, and August 28, 2025.

The Department does not want to allow this permit to continue to sit in queue due to a lack of response from the client. Therefore, information from the previous permit renewal will be used with the assumption that the outfall location has not changed. The coordinates from the previous permit renewal were reviewed to discover the Outfall coordinates are 41˚15' 52.36", -76˚ **4' 37.65".** However, these coordinates still depict the location of the facility and not the actual location of Outfall 001 to the receiving stream. The Outfall 001 coordinates were updated using information from prior inspection reports, the previous renewal, and site mapping of the facility. The previous permit also identifies Unnamed Tributary 28314 to Hunlock Creek as the receiving stream and the same RMI value from the previous permit was used for modeling.

Approve	Deny	Signatures	Date
X		/s/ Allison Seyfried Zukosky / Project Manager	October 2, 2025
X		/s/ Edward Dudick, P.E. / Environmental Engineer Manager	October 2, 2025

Summary of Review

Limitations for pH, $CBOD_5$, Dissolved Oxygen, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit.

Limitations for Ammonia-Nitrogen and Total Residual Chlorine (TRC) are water quality-based and carried over from the previous permit. WQM 7.0 modeling and the TRC Calculation Spreadsheet both did not recommend stricter limits.

Sewage discharges now require monitoring and reporting for E. Coli. A monitoring frequency of 1/month for design flows >= 1 MGD, 1/quarter for design flows >= 0.05 and < 1 MGD, 1/year for design flows of 0.002 – 0.05 MGD will be utilized.

The monitoring/reporting for Total Nitrogen (TN), Total Phosphorus (TP), Total Kjeldahl Nitrogen (TKN), and Nitrate-Nitrite as N has been maintained in this permit.

For this permit renewal, all monitoring frequencies for parameters with limitations are consistent with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (document no. 362-0400-001).

There are no representative stream gages in the vicinity of the outfall and the drainage area at Outfall 001 is too small for USGS StreamStats to estimate accurate low flow values. Therefore, the default Low Flow Yield (LFY) of 0.1 cfs/mi^2 was used to model the discharge. For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA, drainage areas were delineated using USGS's StreamStats Interactive Map, and elevations were obtained using the elevation profile feature of StreamStats.

The existing permit expired on February 29, 2024 and the application for renewal was received on time. However, please note the lack of response from the permittee and their consultant during the technical review which is described at the beginning of this fact sheet. Due to the lack of responsiveness from the permittee, the draft permit documents will be sent via electronic mail and certified mail to ensure they are received.

A Water Management System Inspection query indicated a Compliance Evaluation was performed on February 15, 2024 and a Routine/Partial Inspection was conducted on June 18, 2024.

There are currently no open violations for this client that warrant withholding issuance of this permit.

Sludge use and disposal description and location(s): As per the permittee's NPDES Renewal Application, sludge is hauled to the Hazelton Joint Sewer Authority in West Hazelton, PA by Environmental Service Corp.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0144
Latitude	41º 15' 53.42"	Longitude	-76º 4' 48.40"
Quad Name	Harveys Lake	Quad Code	0837
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Hunlock Creek (CWF, MF)	Stream Code	28314
NHD Com ID	65633993	RMI	1.44
Drainage Area	0.63	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.063	Q_{7-10} Basis	State-wide default
Elevation (ft)	1,1154.27	Slope (ft/ft)	-
Watershed No.	5-B	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-
Nearest Downstream Public Water Supply Intake	Danville Municipal Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	-
PWS RMI	122.5	Distance from Outfall (mi)	~46

Treatment Facility Summary

Treatment Facility Name: Country Crest MHP

WQM Permit No.	Issuance Date
4073414	1973

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Aeration/ Filter	Chlorination	0.0079 (2021-2023)

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0144	32.6	Not Overloaded	Settled/Holding Tank	Hauled

Compliance History

DMR Data for Outfall 001 (from September 1, 2024 to August 31, 2025)

Parameter	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24
Flow (MGD) Average Monthly	0.0073	0.0074	0.0085	0.0137	0.0104	0.0108	0.0124	0.0162	0.0099	0.0073	0.0062	0.0063
Flow (MGD) Daily Maximum	0.011	0.0118	0.0167	0.0203	0.0141	0.0145	0.0179	0.095	0.0167	0.0117	0.008	0.0082
pH (S.U.) Instantaneous Minimum	6.7	6.68	6.25	6.5	6.7	6.45	6.48	6.81	6.57	6.49	6.69	7.19
pH (S.U.) Instantaneous Maximum	7.73	7.37	7.34	7.1	7.21	7.4	7.67	7.46	7.37	7.31	7.74	7.60
DO (mg/L) Instantaneous Minimum	5.13	4.51	5.08	5.33	7.33	5.59	6.6	8.26	6.02	5.81	4.53	3.34
TRC (mg/L) Average Monthly	0.4	< 0.3	0.2	0.1	< 0.2	0.2	< 0.1	0.2	0.2	0.2	0.2	0.2
TRC (mg/L) Instantaneous Maximum	1.18	0.7	0.75	0.37	0.66	0.7	0.63	0.72	0.69	0.3	0.67	0.54
CBOD5 (mg/L) Average Monthly	< 6.0	< 7.3	< 6.0	< 6.0	< 6.1	< 6.0	19.2	< 6.0	< 6.0	8.1	16.1	105.0
TSS (mg/L) Average Monthly	< 5.0	6.1	< 5.4	9.5	11.5	23.0	61.0	< 6.0	< 9.7	< 10.1	71.0	15.7
Fecal Coliform (No./100 ml) Geometric Mean	< 2	10	< 8	< 2	10	< 4	> 602	87	6	3	185	< 2420
Fecal Coliform (No./100 ml) Instantaneous Maximum	3.1	93.3	68.3	3.1	19.9	18.1	> 2419.6	1011.2	16.4	8.5	2419.6	< 2419.6
Nitrate-Nitrite (mg/L) Average Quarterly			0.14			< 28.0			< 10.1			11.02
Total Nitrogen (mg/L) Average Quarterly			19.51			38.41			0.48			51.32
Ammonia (mg/L) Average Monthly	< 0.2	0.6	< 0.2	0.4	< 1.0	< 2.0	< 2.0	< 0.5	< 0.2	0.7	< 1.5	56.8
TKN (mg/L) Average Quarterly			< 1.0			12.1			< 2.50			40.3

Total Phosphorus (mg/L) Average Quarterly			2.7			6.69			5.40			3.61

Compliance History

Effluent Violations for Outfall 001, from: October 1, 2024 To: August 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
DO	07/31/25	Inst Min	4.51	mg/L	5.0	mg/L
DO	10/31/24	Inst Min	4.53	mg/L	5.0	mg/L
TRC	08/31/25	Avg Mo	0.4	mg/L	.3	mg/L
TRC	01/31/25	IMAX	0.72	mg/L	.7	mg/L
TRC	08/31/25	IMAX	1.18	mg/L	.7	mg/L
TRC	06/30/25	IMAX	0.75	mg/L	.7	mg/L
TSS	02/28/25	Avg Mo	61.0	mg/L	30.0	mg/L
TSS	10/31/24	Avg Mo	71.0	mg/L	30.0	mg/L
Fecal Coliform	02/28/25	Geo Mean	> 602	No./100 ml	2000	No./100 ml
Fecal Coliform	02/28/25	IMAX	> 2419.6	No./100 ml	10000	No./100 ml

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0144
Latitude 41º 15' 52.36" **Longitude** -76º 4' 37.65"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25.0	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	50.0	IMAX	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	60.0	IMAX	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
E. Coli	Report	IMAX	-	92a.61
Dissolved Oxygen	5.0	Minimum	-	BPJ

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Total Residual Chlorine	0.3	Average Monthly	Previous Permit/Modeling
	0.7	IMAX	
Ammonia-Nitrogen Nov 1 - Apr 30	10.5	Average Monthly	Previous Permit/Modeling
	21.0	IMAX	
Ammonia-Nitrogen May 1 - Oct 31	3.5	Average Monthly	
	7.0	IMAX	
Nitrate-Nitrite as N	Report	Average Quarterly	Previous Permit
Total Nitrogen	Report	Average Quarterly	
Total Kjeldahl Nitrogen	Report	Average Quarterly	
Total Phosphorus	Report	Average Quarterly	

Anti-Backsliding

No limitations were made less stringent.

Modeling Using the state-wide Low-Flow Yield (LFY) of 0.1 cfs/mi^2:

$$\frac{0.1\ ft^3/sec}{mi^2} \times 0.63\ mi^2 = \frac{\mathbf{0.063\ ft^3}}{\mathbf{sec}}$$

Modeling Using USGS StreamStats Data:

At Outfall 001 on Unnamed Tributary to Hunlock Creek (28314):

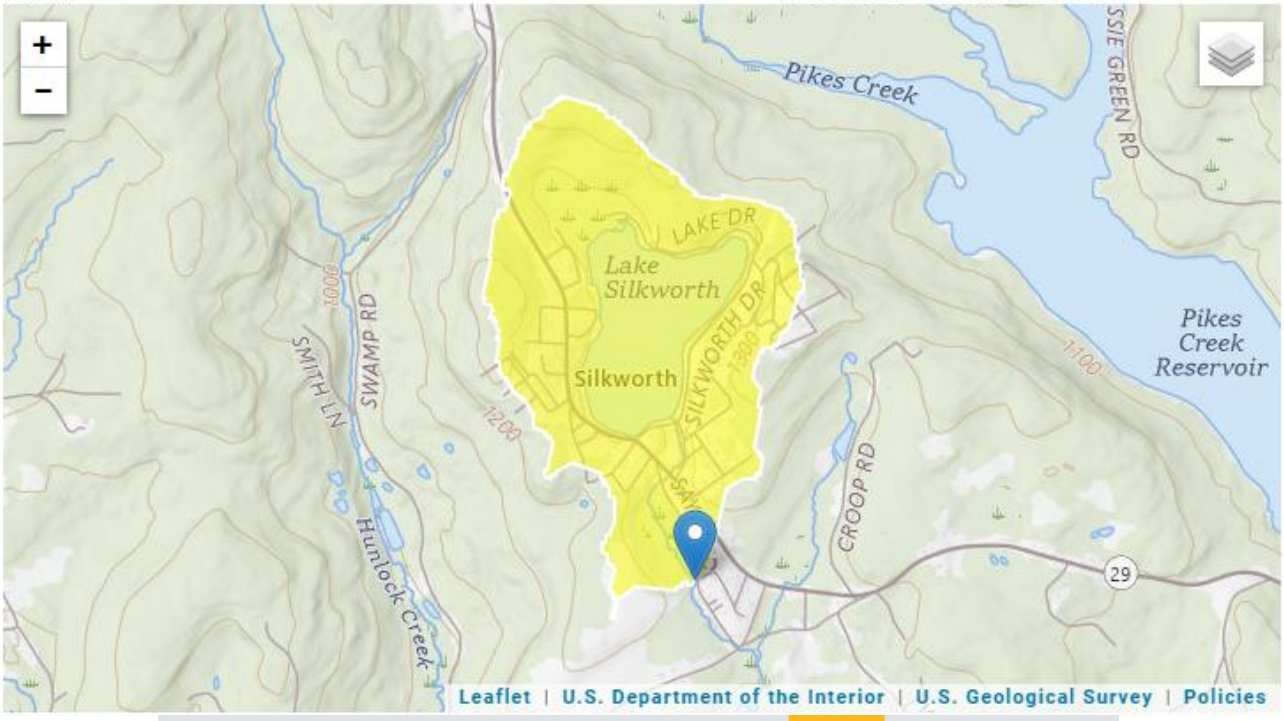
RMI	Elevation (ft)	Drainage Area (mi^2)	$Q_{7\text{-}10}$ Flow (cfs)
1.44	1,154.27	0.63	0.014

$$Low\ Flow\ Yield\ using\ StreamStats = \frac{0.014\ ft^3/sec}{0.63\ mi^2} = \mathbf{0.022}\ \frac{\mathbf{ft^3/sec}}{\mathbf{mi^2}}$$

*Please note that the USGS StreamStats calculated $Q_{7\text{-}10}$ and LFY were not used to model the discharge

StreamStats Report

Region ID: PA
Workspace ID: PA20251001135335568000
Clicked Point (Latitude, Longitude): 41.26487, -76.08021
Time: 2025-10-01 09:53:55 -0400



DRNAREA	Drainage Area	0.63	square miles

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

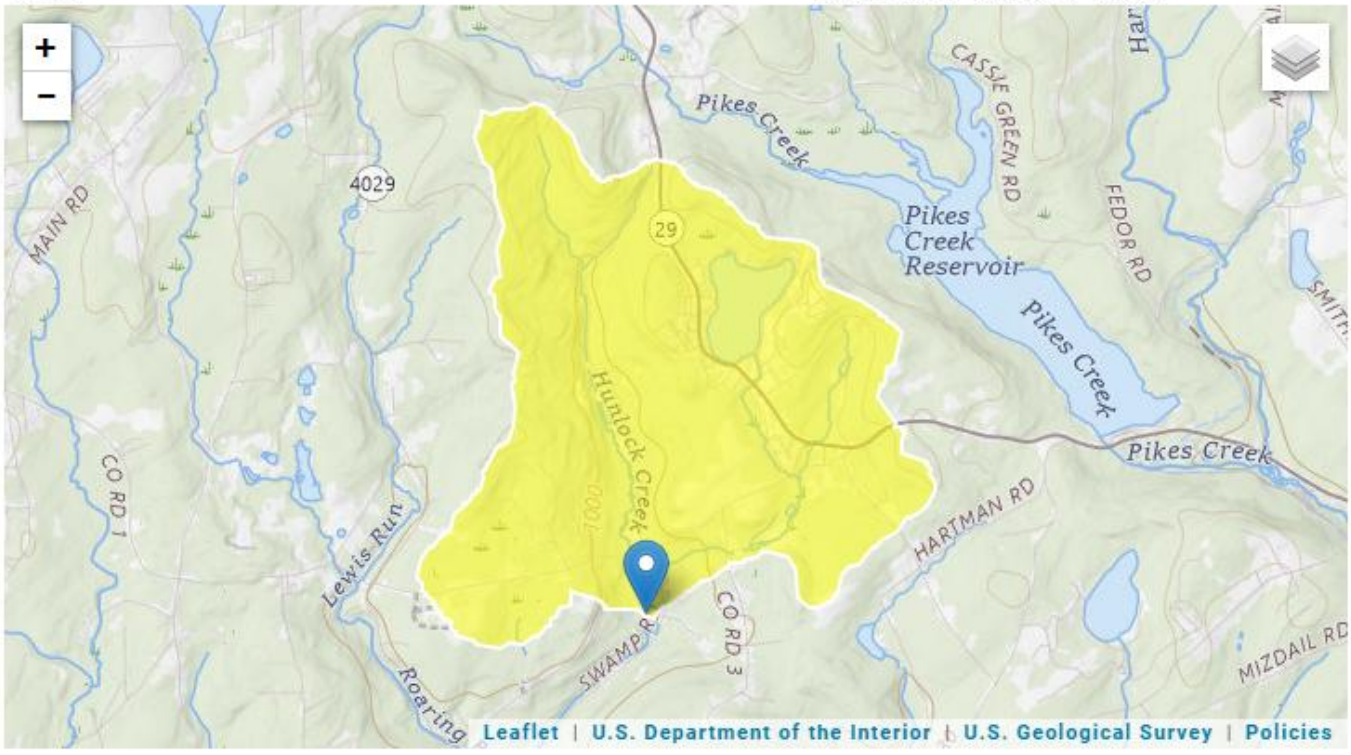
Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0418	ft^3/s
30 Day 2 Year Low Flow	0.0627	ft^3/s
7 Day 10 Year Low Flow	0.014	ft^3/s

At confluence with Hunlock Creek:

RMI	Elevation (ft)	Drainage Area (mi^2)
0.00 5.32 (on Hunlock Creek)	814.63	3.83

StreamStats Report

Region ID: PA
Workspace ID: PA20251001140051925000
Clicked Point (Latitude, Longitude): 41.25274, -76.09139
Time: 2025-10-01 10:01:12 -0400



DRNAREA	Drainage Area	3.83	square miles

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
05B	28314	Trib 28314 to Hunlock Creek

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
1.440	CountyCrestMHP	PA0060917	0.014	CBOD5	25		
				NH3-N	8.62	17.24	
				Dissolved Oxygen			3

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.063	= Q stream (cfs)	0.5	= CV Daily
0.0144	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.921	1.3.2.iii	WLA cfc = 0.891
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.343	5.1d	LTA_cfc = 0.518

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.422	AFC
		INST MAX LIMIT (mg/l) = 1.382	

WLA afc	(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...
	...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...
	...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)

WQM 7.0.pdf