# Access Control and User Authentication

Chris Chapman, US EPA National Ambient Air Monitoring Conference August 10, 2016 – St. Louis, Missouri



# What I want you to get (elevator pitch)

- Two ways to logon to AQS.
- Two security models currently in force.
   Screening Groups vs. Agency Based
- Agency Based was developed when QA system was redesigned.
- Agency Based will completely replace screening groups eventually.



#### Two ways to logon

#### AQS ID

#### **ENSC ID**

#### AQS UNIFIED LOGON FORM

Username:	cix
Password:	******
Database:	aqsqa
	<u>Connect</u> Exit

#### AQS UNIFIED LOGON FORM

Username:	chapman.chris@epa.go	v
Password:	****	
Database:	aqsqa	
	Connect	Exit

# Screening Groups

- Monitors owned by a screening group (one and only)
- Members of screening groups can modify data for monitors owned by that screening group (with proper role)
- Monitors can only belong to one screening group
- Users can belong to multiple screening groups and have multiple roles within a screening group
- Screening group security still in force for sites, monitors, Raw Data (Sampling measurements) on forms and in batch. Not for QA



### **Screening Groups**

C Read Only User		
Screening Group Access		
User Support Screening Group Access		
AQSQA data Select a Screening Group		
Select a Screening Group for this session:		
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	LAT MAIN	
USER_SUPPORT	OTHER	
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USER_SUPPORT	OTHER	
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## **Groups and Roles**

Jser Profile	Maint	ain Security	n Security Security Reference Tables Maintain Roles		es	User History					
Maintain Security											
		Screening Gr	oup Name								
		SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT									
AAX		SONOMA TE	CHNOLOGY,	INC.		*					
AAY		UPPER SKA	git indian tr	RIBE OF WA		*					
ABG		CONFEDERA	TED TRIBES	OF CLUSI		*					
- ABG		THE WIND RI	VER RESERV	/ATION		-					
Role Users	;										
			Oracle I	Jser		ning Group Name					
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#### **User Roles**

Security Roles	Definition
Raw Data Update User	Can update raw data
PA Data Update User	Can update QA data
Read Only	Read only user
FRM Auditor	Maintain Independent Assessments
Regional Admin	Concur with Exceptional Events and Certification
Audit Coordinator	Schedule and review Independent Audits (NPAP/PEP)
EPA_HQ	Concur with Certification
Data Admin	Used only by NADG can access any data in AQS.



#### **Role Permissions**

Data Type	Permitted to Update
Site Metadata	Raw Data, PA Data,
Monitor Metadata	Raw Data, PA Data,
Raw Data	Raw Data,
Routine QA /QC	Handled by Agency Based Security
Independent QA/QC (PEP,NPAP)	Handled by Agency Based Security
Lab Assessments	Handled by Agency Based Security
Certification	Data Admin, EPA HQ, Regional Admin, Regional HQ (not all roles the same authority)
Exceptional Events	Entered by Screening Group, Concurred by Regional Admin



## Agency Based Security

- User belongs on one agency
- Monitors are assigned to agency roles. A monitor may have different agencies for different roles
- One agency in a role for a monitor at a time, but you can change the monitor having that role
- To handle users who need access to more than one agency's set of monitors, there are parent and child agencies
- Agency Based Security does not apply to raw data and site/monitor metadata forms (DOES apply to batch)

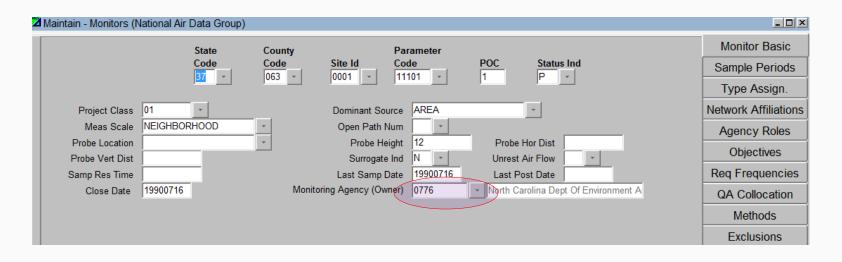


## User Profile with Agency Assignment

Z	Administration - A	Application Security (	National Air Data	Group)							
	User Profile	Maintain Securi	T.	ference Tables	Mainta	n Roles	Use	er History			
I	First Name	CHRIS	Initial	C.			Last	CHAPMAN			
I	Phone	919.541.2073	Street Address 1	109 TW Alexander E	)rive	Street Addr	ess 2				
I	Zip Code	27711 -	City	DURHAM		State	Code	37			
I	County Code	063 -				Agency	Code	1108 -	>		
I	AQS User ID	CIX	User Type	H ·		AQS Co	ontact	N			
I	EN User ID	CHAPMAN.CHRIS@	Status Ind	P ×		EPA Region	Code	· ·			
		919.541.7674	<u>E Mail</u>	chapman.chris@epa	.gov	Triba	l User		Create	oracle ID	
	Tax	515.541.1014			Delete	Error Trans	action	N			



## Maintain Monitor Form: Owning Agency



#### Note: Screening Group not on Maintain Monitor Form



## Maintain Monitor Form: Agency Roles

#### Maintain - Monitors (National Air Data Group)

				Monitor 37-073-5006-44201-1	1	Monitor Basic
Agency Roles Agency Role		Agency (	Code	· · · · · · · · · · · · · · · · · · ·	nd Date	Sample Periods
	•	0776	-	North Carolina Dept Of Environment And Natural Resources 20160101		Type Assign.
COLLECTING	+	0776	+	North Carolina Dept Of Environment And Natural Resources 20160101		Network Affiliations
PQAO	+	0776	*	North Carolina Dept Of Environment And Natural Resources 20160101		Agency Roles
REPORTING		0776	-	North Carolina Dept Of Environment And Natural Resources 20160101		Objectives
	-		-			Req Frequencies
	*		~			QA Collocation
			-			Methods
	~					Exclusions
	*		*			Pollutant Area
	-		-			Tangent Road
	-					Probe Obs.
·]	Ψ.		Ψ.		_	Reg Compliances
						Protocols
						Channels
						Comments



### **ADMIN AGENCY**

SADMIN				
Admin Agencie	s			
Agency Code	0403 🔹	Agency Name	Forsyth County Environmental Affairs Department	
Agency Type Code	G	Agency Type	County Agency	
State Code	37 -	State Name	North Carolina	
Contact Name	Mr. Patrick Reagan			
Contact Phone	(336) 727-8060			
Contact Email Address	reaganpa@co.forsyth	n.nc.us		
Parent Code	-	Parent Name		>
Status Ind	P			



# Agency Roles

Role	Definition
Owning (Monitoring)	Monitoring agency responsible for operating a monitoring site for which the quality assurance regulations apply. (58)
PQAO	A monitoring organization, a group of monitoring organizations or other organization that is responsible for a set of stations that monitor the same pollutant and for which data quality assessments can be pooled. Each criteria pollutant sampler/monitor at a monitoring station must be associated with only one PQAO.(58)
Reporting	An entity, such as a state, local, or tribal monitoring agency, that reports air quality data to the EPA. (58)
Certifying	Agency authorized to certify the data for a monitor
Analyzing	Agency responsible for analyzing lab filters for a monitor.
Collecting	Agency responsible for collecting samples for a monitor
Auditing	Agency authorized to conduct independent QA audits (NPAP & PEP). Usually an EPA Region, unless self-implementing state
0/4 5/0040	LLO. Environmental Protection Anonexi



## Agency Permissions

Data Type	Permitted to Update, including user roles				
Site Metadata	Owning, PQAO (must have Raw Data or PA role as well)				
Monitor Metadata	tadata Owning, PQAO (must have Raw Data or PA role as well)				
Raw Data Owning, Reporting (must have Raw Data role)					
Routine QA /QC Owning, PQAO, Reporting, Analyzing, Collecting (must have					
Independent QA/QC (PEP,NPAP)	Auditing (must have Audit Coordinator Role as well). This is for approving the audits. Data is submitted automatically via PEAT.				
Lab Assessments	Owning (must have PA role)				
Certification	Certifying (privileges to form also role based)				
Exceptional Events	N/A (not applicable to form yet)				