

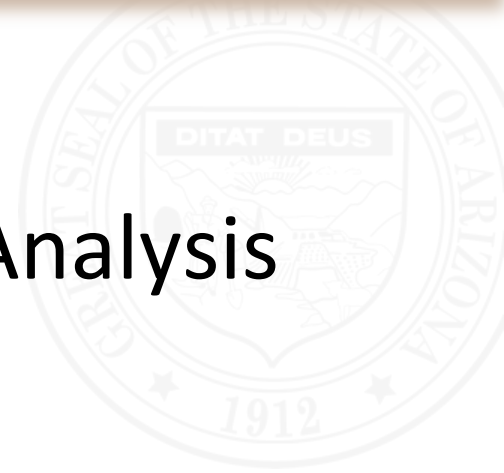
LEARNING IN STREAMLINING THE NPDES PERMIT PROCESS

Chris Montague-Breakwell
AZPDES Permits Unit Manager



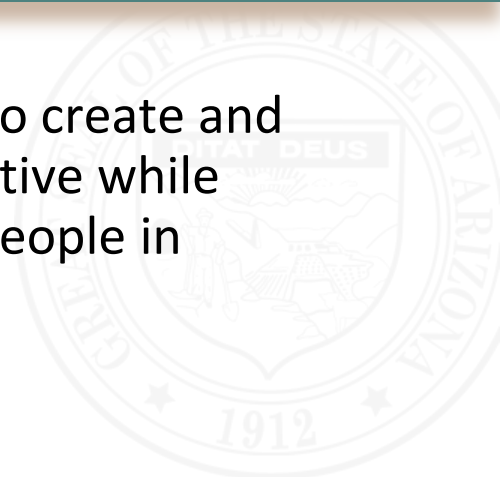
Why is Permit Backlog Important?

- Up to date WQS
- Recent Reasonable Potential Analysis
- Happy customers



What is Lean

- Lean is a set of concepts, principles and tools used to create and deliver the most value from the customer's perspective while consuming the fewest resources, and by engaging people in continuous problem solving.
- **Lean is a culture not just a set of tools!**



Learning Outcomes

By the end of the presentation you will be able to ...



Use AMS to achieve Mission Outcomes



See your work as a process



Identify waste in your process



Determine value by asking the customer



Create and use standard work



Identify and resolve problems



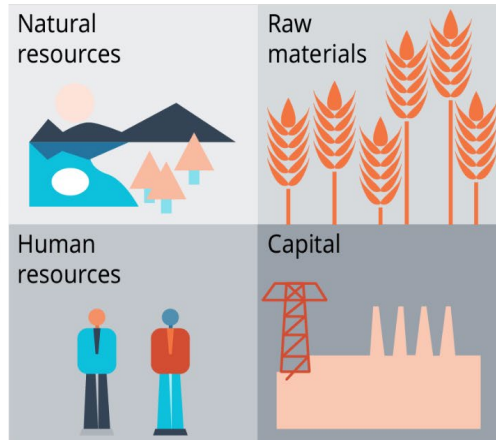
Use Plan, Do, Check and Act



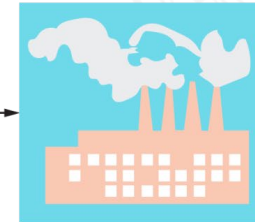
Visually manage your work

What is a Process?

Inputs (factors of production)

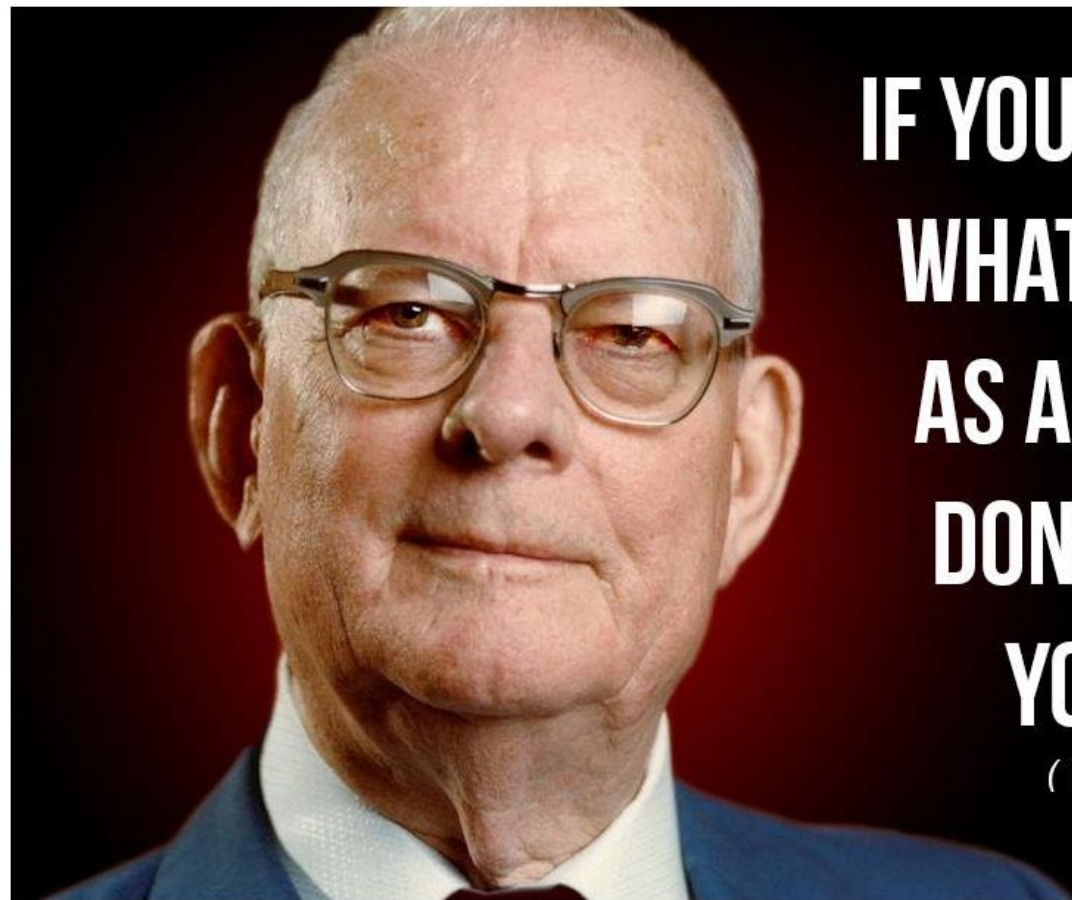


Conversion Process



Outputs

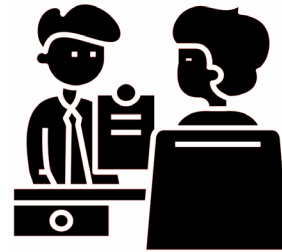




**IF YOU CAN'T DESCRIBE
WHAT YOU ARE DOING
AS A PROCESS, YOU
DON'T KNOW WHAT
YOU'RE DOING.**

(W Edwards Deming said)

Process in a Regulatory Agency



INPUT:
Customer
Application



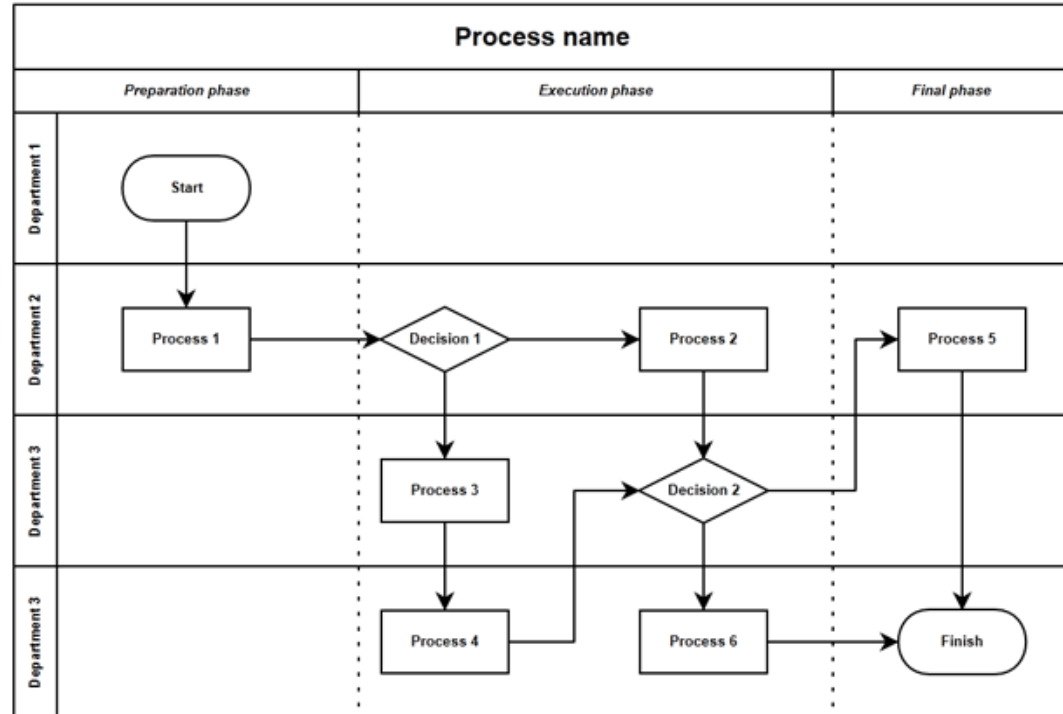
CONVERSION:
Technical Review



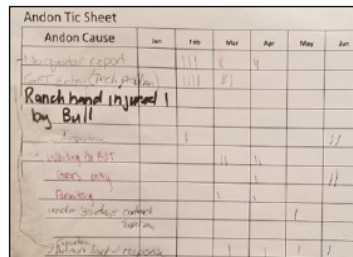
OUTPUT:
Permit

Mapping the Process

Swimlane Map

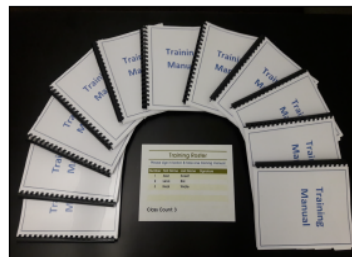


8 Wastes—DOWNTIME



Defects

Errors or mistakes causing rework to correct the problem. Abnormalities and exceptions to the process.



Overproduction

Creating too much material or information. Excess inventory.



Waiting

Waiting for material or information to be processed.
A stoppage in the process.



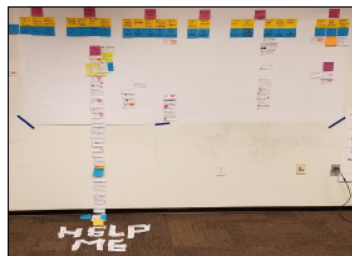
Non-Utilized Talent

Lack of cross-training. Not sharing skills & talent. Not recognizing the value of improvement ideas from all levels of the organization.



Transport

Moving material or information more than absolutely necessary.



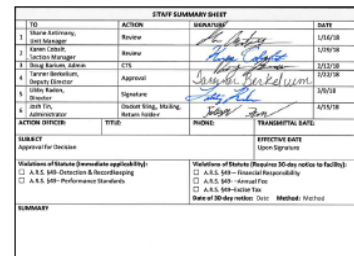
Inventory

Having more material or information than you need to fill customer orders.
A build-up of orders within a step of the process.



Motion

Movement and motions of people to access or process materials and information more than absolutely necessary. Poor ergonomics.



Excess Processing

Processing more than necessary to achieve customer, legal, or policy requirements. CYA.

Critical to Quality (CTQs)

Key measurable characteristics
which must be met in order to
satisfy the customer



Writing a CTQ



**What
customer
said.....**

*Time is money, I can't
afford permit delays.*



**Actionable
Quantitative
CTQ**

**Permit must be
issued within 14
calendar days of
application**

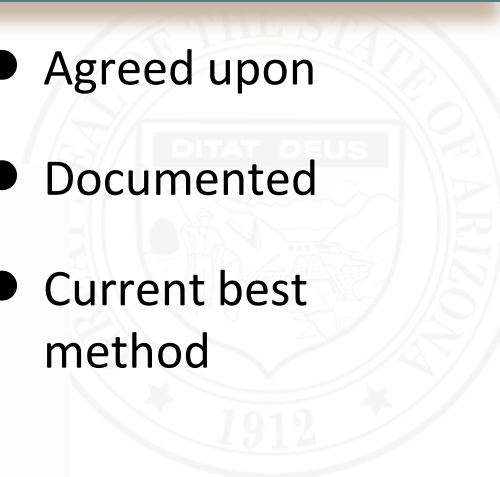
What is standard work?

*The documented, current,
SINGLE, BEST WAY*

WAY

- Agreed upon
- Documented
- Current best method

We know **today** how to perform the work



Example

Description:	Standard work Employee Time Entry (without Accounting Template)			Author:	Mary Canez & Kristin Berry
Process Owner:	Business and Finance			Rev. Date:	1/18/2022
Tools & supplies required:	HRIS - YES			Expiration Date:	7/17/2022
Safety:		5S:			
Process Map	Include process map and time elements (include Touch time, Elapsed time and Wait time)				
	<div><p style="text-align: right;">Total ET: 1 day Total TT: 17 min</p></div>				
Seq.	Important Steps - What? Process segments	Desired Outcome Resultant outcome from the process step (Inputs/Outputs)	Key Points - How? (Critical to Quality)	Reasons - Why? Why for key point Items	
1	Log into YES	To access the ETE template	https://hrsystems.azdoa.gov/	State of AZ employees submit time worked through HRIS - YES	
2	Left hand corner of screen is Employee Time Entry (ETE) Tab - Click on this to open ETE Menu and then click the ETE menu tab. Then Click on Time Entry Form	To open ETE for prior Pay Period	Click on ETE Time Entry and then ETE Menu and then Time Entry Form	Screen needs to be opened to enter hours worked	
3	Employee Time Entry Form will open for Week one. Select Add under the function Code (FC)	Since this is your first entry add under Function code must be selected so Items you are entering will be saved	Click the down arrow button under FC	Since this is your first entry add under Function code must be selected so Items you are entering will be saved	

Not having problems is a problem!

Problems are GOLD!

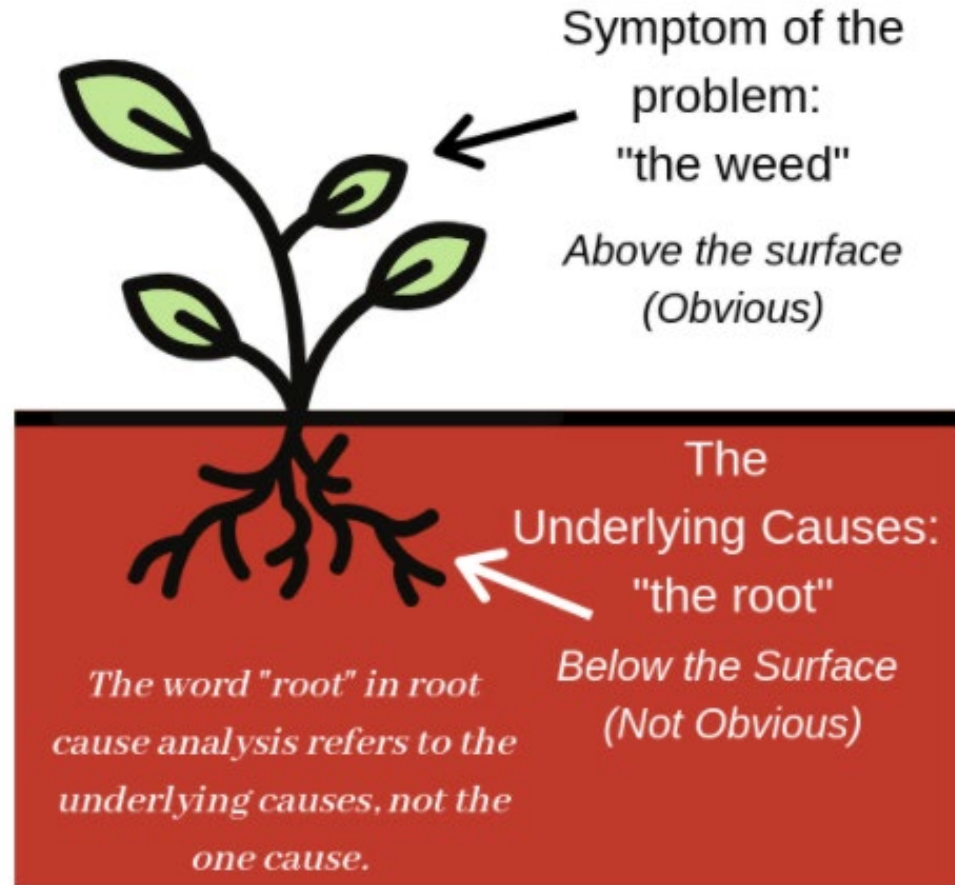
“Problems are gold to be treasured, not garbage to be burned.”



Don't Jump to Problem Solving



Find Root Cause(s)



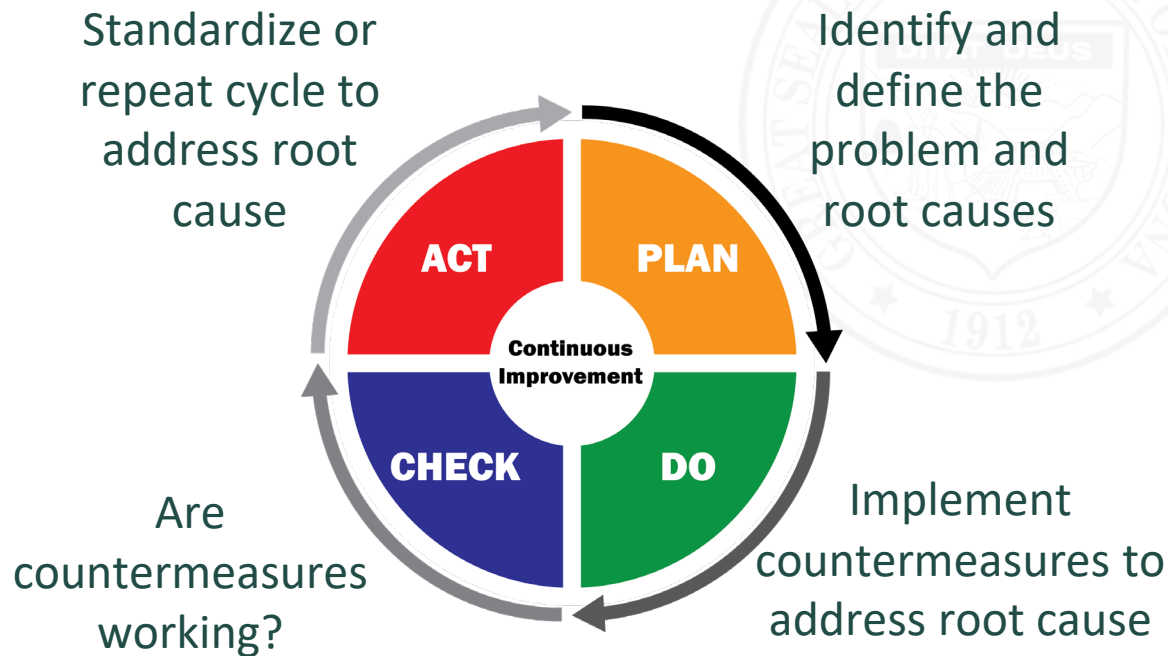
Prioritize your Problems!

*Focus on those with the
greatest impact and the
highest frequency*



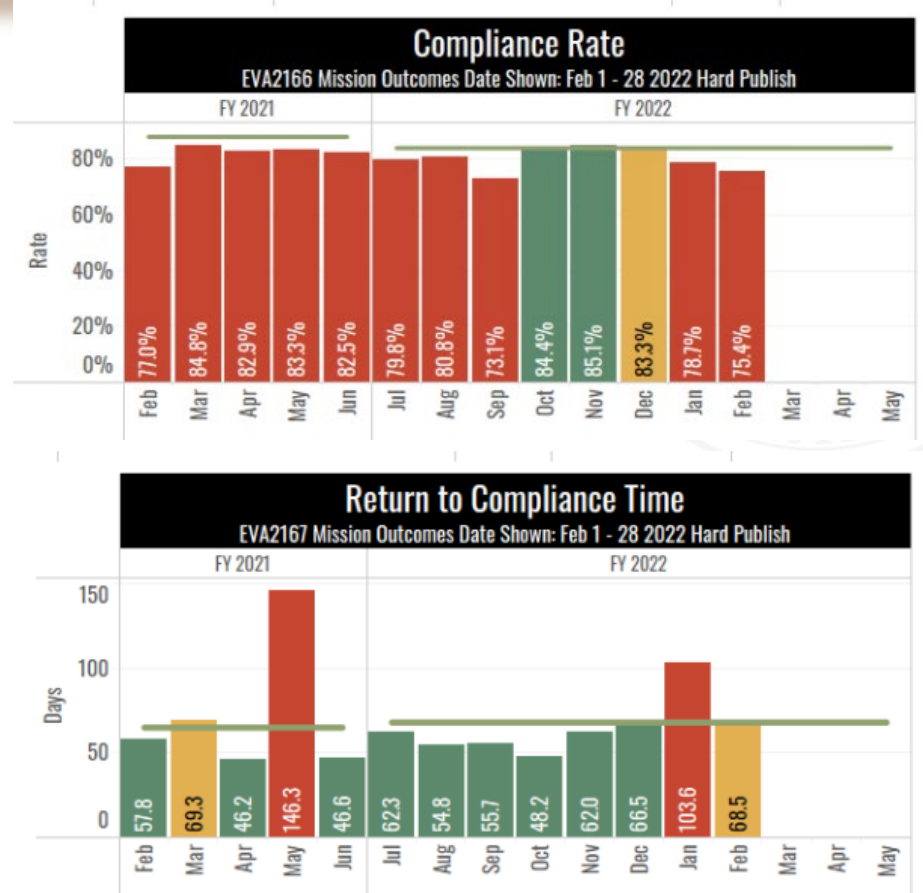
Structured Approach

4-Steps



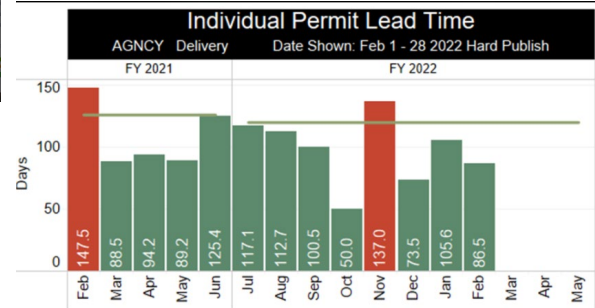
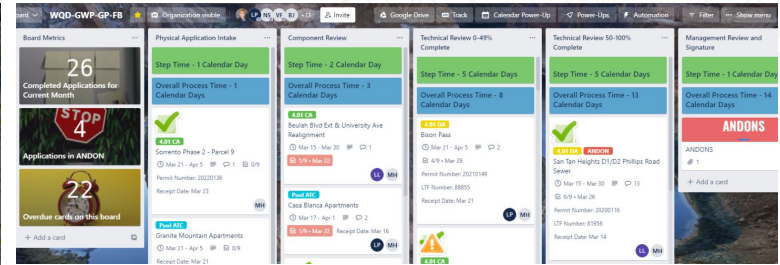
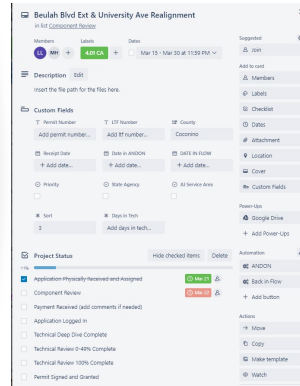
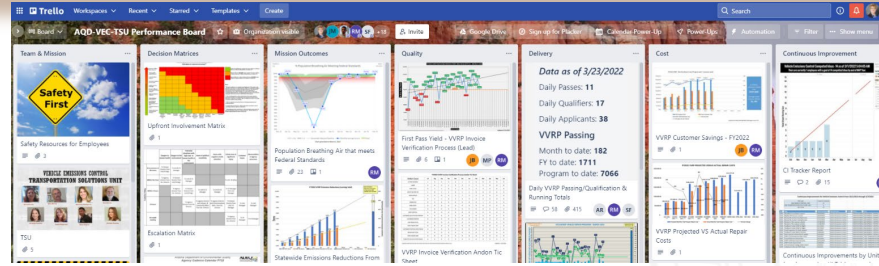
What is Visual Management?

The use of tools to communicate information visually



Types of Visual Management

Trello
Tableau
Google Sheets



Visual Management

WQD-SWP-Permits-FB Individual Permits Organization visible Board Table

Google Drive Track Calendar Power-Up Create new proxie Power-Ups Automation Filter CM VF AA CH +21 Share

Pre-Application Outreach

Step Time - 4 Months prior to application due date

4

Active Proxies

- Minor Industrial

Rio Salado Habitat Restoration Area

3/78

Permit Number: AZ0024554

Renewal Letter Sent: Nov 22, 2022

Application Due: Feb 28

RH

Administrative Completeness (10 days)

Step Time - 10 days

4

In this list

- Pretreatment

Goodyear 157th Ave - Local Limits Modification

1/25 LTF Number: 97,674

RH

ANDONS

Andons

1

- Major WWTP

+ Add a card

Drafting - RP Analysis (60 days)

Step Time - 50 Days

1

In this list

2

Stale cards in this list

- Minor WWTP

Oracle Wastewater Treatment Plant

2 7/61

Permit Number: AZ0020681

LTF Number: 97,937

Renewal Letter Sent: Jan 25

+ Add a card

Peer Review (63 days)

Step Time - 3 Days

0

In this list

ANDONS

Andons

1

+ Add a card

Manager Review (66days)

Step Time - 3 Days

2

In this list

- Major WWTP

Sarival Water Reclamation Facility

2 14/51

Permit Number: AZ0026254

LTF Number: 96,995

Admin Completeness Due: Dec 2, 2022

Int/Ext Due: Jan 26

Public Notice Due: Feb 20

End of PN Period: Mar 20

Grant Due: Apr 18

KS

+ Add a card

Internal/External (days)

Step Time - 1

In this list

- Major WWTP

Casa Grande W

14/44

Permit Number: A

LTF Number: 97,0

Admin Completer

Int/Ext Due: Feb 1

Int/Ext Actual: Feb

Public Notice Due

Grant Due: May 3

+ Add a card

Visual Management

☒ **Drafting** Hide checked items Delete

100%

☒ Study previous permit files

☒ Input data into RP spreadsheet (Data Sources: Permittee-supplied; lab reports; AZURITE, ECHO, MONGO)

☒ Verify a minimum of 10% of data via a random spot check (Verify all if data is questionable)

☒ Perform RP Analysis

☒ Drafting: 25%

☒ Drafting: 50%

☒ Drafting: 75%

☒ Drafting: 100%

☒ First Draft of FS and Permit Prepared

Add an item

☒ **Peer Review** Hide checked items Delete

100%

☒ Send for Peer Review

☒ Make edits as necessary

Add an item



What's next?

- Achieve and sustain zero permit backlog
- Bring down permit issuance times to <70 days
- Simplified permit renewal





Questions?

