

**Pima County Regional Wastewater
Reclamation Department**



**Getting Sewer
Service Approval
from RWRD**

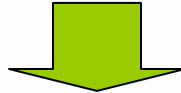
**Kristin (Borer) Greene, P.E.
RWRD Development Liaison Unit
Manager**

**Developers Workshop
June 23, 2010**

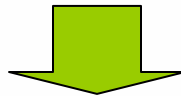
New Sewer for Developer Driven Project?



Planning - Development Liaison Unit (DLU) 3rd Floor – Kristin Borer, P.E.



Planning - DLU 3rd Floor – Chad Amateau, P.E.



Engineering - 3rd Floor – Dave Martin, P.E.



Development Services -2nd Floor – CC Patel , P.E.



Pima County Department of Environmental Quality (PDEQ) – David Amash, P.E.



Permitting Services-1st Floor – Yvonne Suarez

Important Concepts to Remember ...



- **RWRD is the sewer provider in Pima County including City of Tucson, Town of Marana, Town of Oro Valley, and the unincorporated areas of Pima County**
 - RWRD exclusively is responsible for approving the sewer connection for your project
- **Do not assume there is sewer capacity and that your project can connect to any MH – find out about connections and limitations BEFORE you design your site or your building**
- **Underground utilities are the critical path design element in most development projects. Talk to RWRD first!**

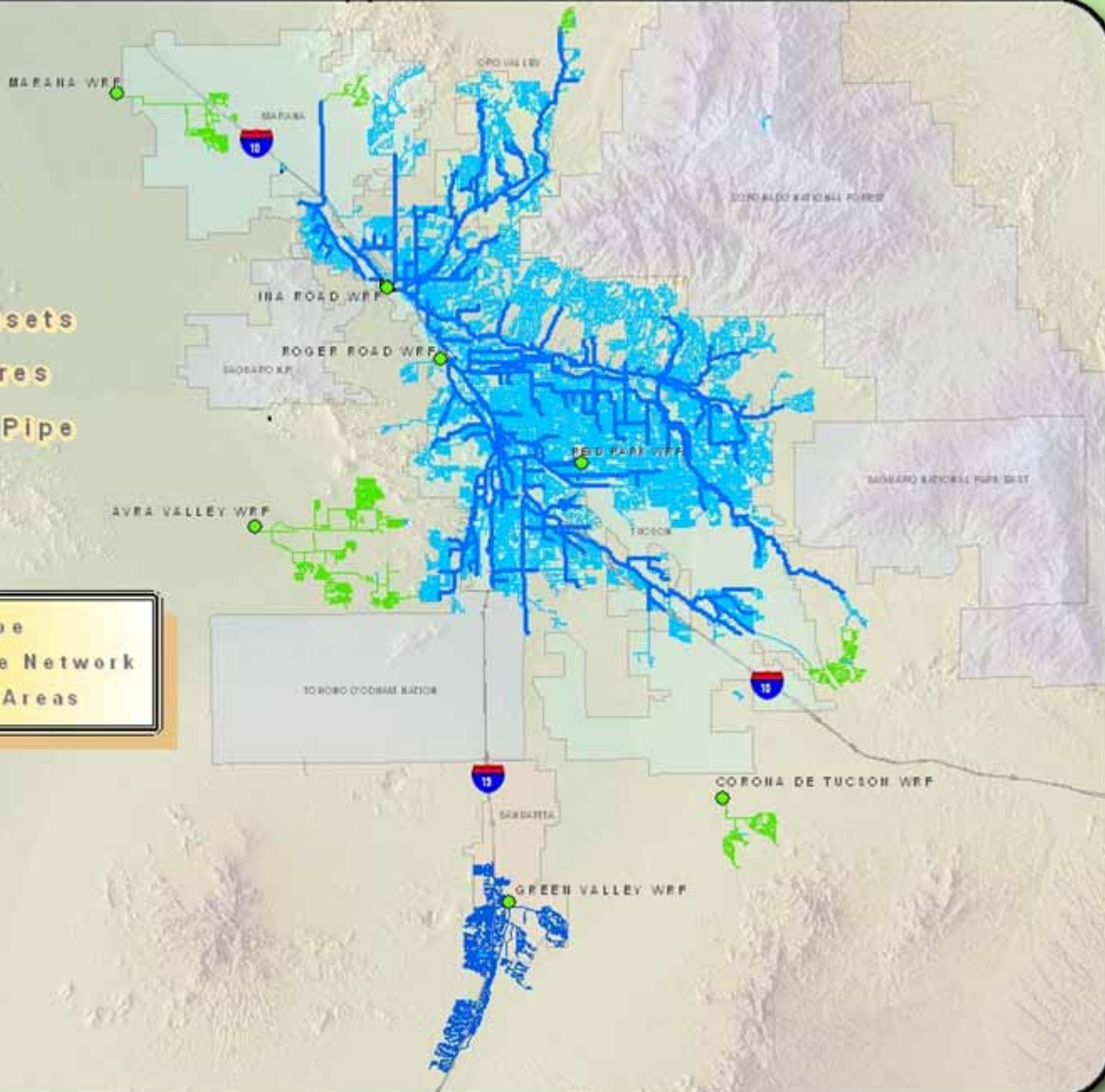
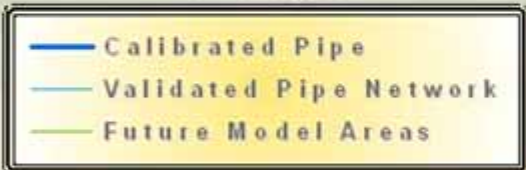


PCRWRD

Conveyance Assets

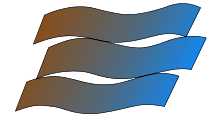
74,000 Structures

3,400 Miles of Pipe

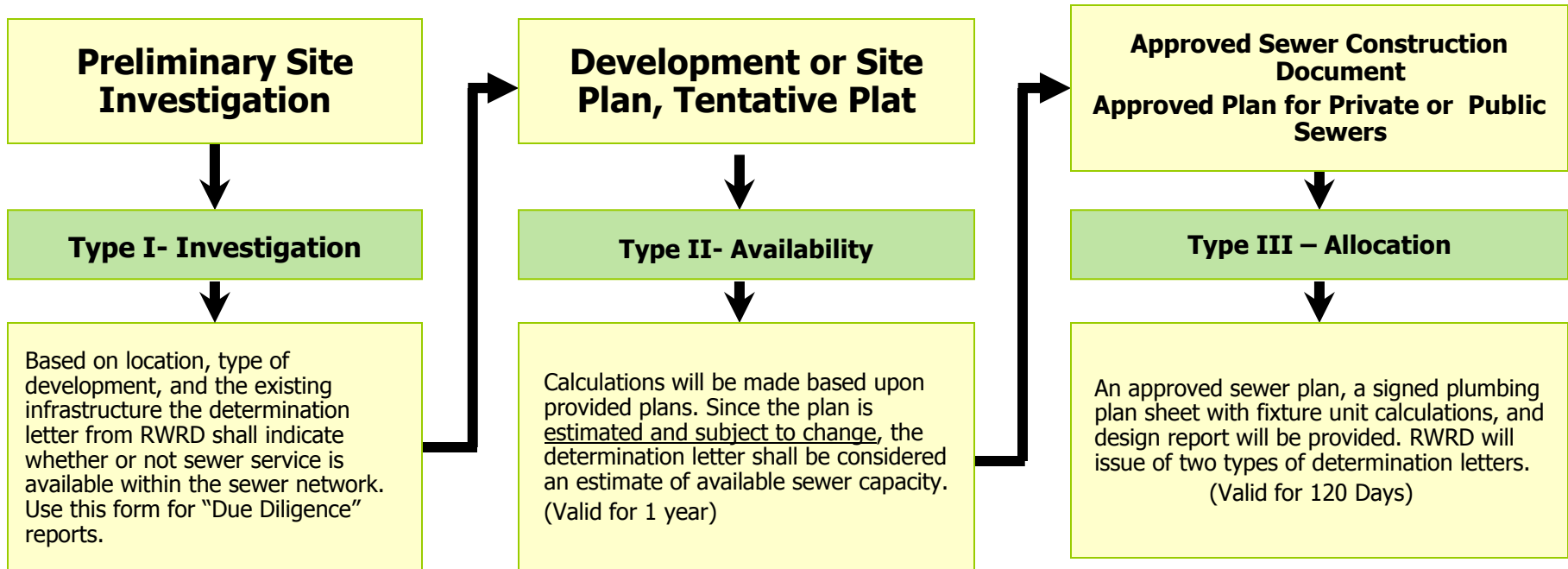




Sewer Capacity Request Forms



(Pima County Code Title 13.20.026.1 Request for Capacity Analysis)



Type III Determination Letters are issued in one of the following formats:

- 1. SEWER CAPACITY IS NOT CURRENTLY AVAILABLE - Applicant will be provided with information on a future Capital Improvement Program projects which will provide needed capacity or RWRD will specify augmentation projects to be constructed by the Developer that will provide the needed capacity requested.**
- 2. SEWER CAPACITY IS AVAILABLE- Applicant will be provided with a letter that will allow PDEQ to move forward in their process to issue the Construction Authorization.**

**Pima County Regional Wastewater
Reclamation Department**



**SEWER REVIEW of
Development Plans,
Tentative Plats, and
Site Plans**

**Chad Amateau, P.E. and
Tom Porter, Sr. CEA
RWRD Development
Liaison Unit**

**Developers Workshop
June 23, 2010**



In most instances the Development Plan, Tentative Plat, and Site Plan from

- City of Tucson
- City of South Tucson
- Town of Oro Valley
- Town of Marana
- Town of Sahuarita (Portions)

ARE SERVED BY RWRD

**Typically, submittals will be routed
by the respective jurisdiction for review by the Planning
Services Section of RWRD**



Per Pima County Title 13.20.040A...

- **If you are proposing a [new connection to the public sewer](#) you must**

**Submit to RWRD Planning Services
Section regardless of what type of plan
you are submitting**

- **All submittals must be submitted to Olivia Canez on
the 2nd Floor of Development Services**



References used in review:

- Pima County
Development /Tentative Plat Checklist – Updated 2006
- Pima County / City of Tucson
Standard Details for Sanitary Sewer – October 2002
- Pima County
Preliminary Sewer Layout Requirements – March 1984
- Pima County
Design Standards for Public Sewerage Facilities – June 1983
- Pima County
Ordinance Title 13. Public Services Division II Sewers
September 2005
- ADEQ
Title 18 Chapter 9 – Water Pollution Control
- **2009 International Plumbing Code Chapter 7 Sanitary Drainage**



RWRD determines...

- Whether sewer will be public (typically residential) or private (typically commercial)
- ***When building offsite sewer*** – If project has qualifying offsite sewer (discounts will be given on connection fees)
- And/or if larger pipe size is necessary (credits will be given to pay connection fees)
 - *Qualifying* means sewer MUST have potential benefit to other properties as determined by RWRD
- **Flow-through**



CRITICAL design information at planning stage

- **Horizontal layout including easements**
- **Point and method of connection to public sewer**
- **Pipe size and type, slope, length**
- **Rim and invert**
- **Vertical information at critical drainage crossings**



Reminders to help expedite plan review

- **If you have unique circumstances please call to setup a meeting**
 - This could make plan reviews quicker
- **Secure Type II Capacity Letter**
- **Identify existing manholes (IMS #) in Pima County MapGuide with construction plan number (G #)**
- **List existing and proposed fixture units**

**Pima County Regional Wastewater
Reclamation Department**



**Variance Review and
Approval Process**

**Dave Martin, P.E.
RWRD Engineering Services
Section**

**Developers Workshop
June 23, 2010**

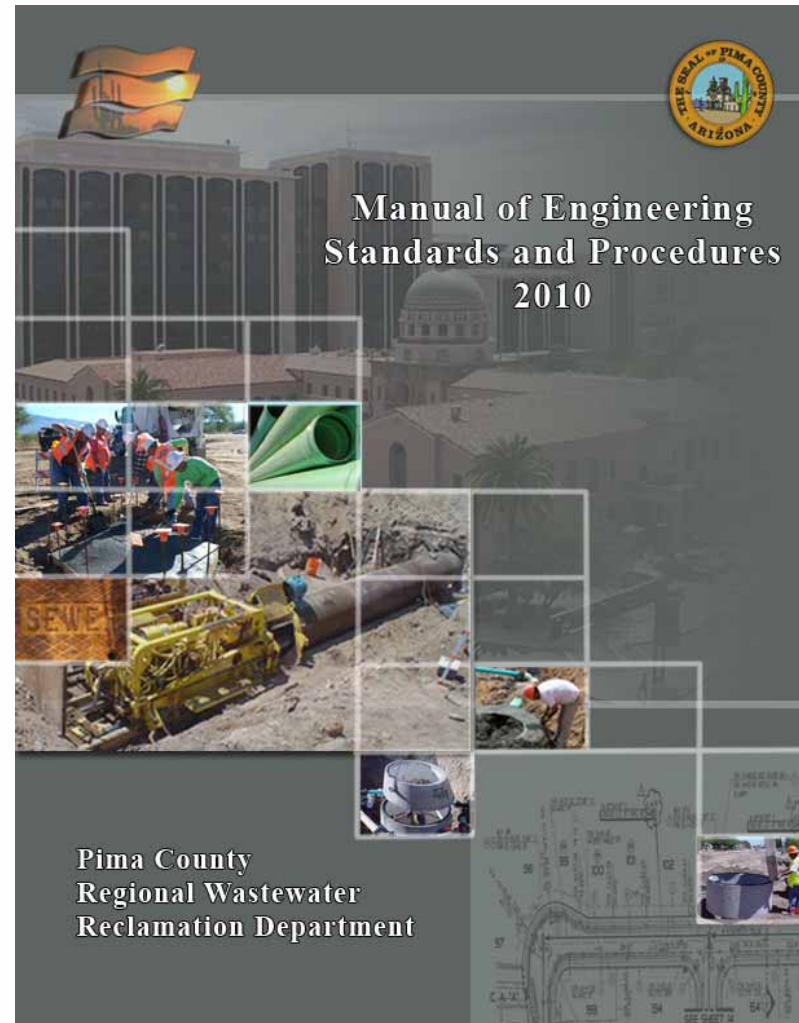
Engineering Services Section (ESS)



- **Variance Review and Approval Process**
 - A variance may be allowed to the preliminary sewer layout requirements and standard specifications when strict adherence would less adequately provide for the development, maintenance and efficiency of the public sewer system
- **A Variance may be granted for:**
 - Design slopes less than the standard minimum would eliminate the need for a pump station
 - Substitution for the change of material
 - Existing field conditions (utility conflicts)
 - Emergency situation prohibits strict adherence



Coming soon... The "Manual"



**Pima County Regional Wastewater
Reclamation Department**



**Sewer Improvement
Plans Review Process**

**C.C. Patel, P.E.
Civil Engineering Manager
Development Services
Department (DSD)**

**Developers Workshop
June 23, 2010**



I used to play here as a kid, but of course,
that was before Humans built that sewer pipe...



- **Improvement plans are submitted to Development Review Division only for public sewers**
- **Private sewer improvement plans are submitted to Pima County Department of Environmental Quality**



- **Prepare plans to conform with approved DP or TP, and to comply with RWRD & State design standards**
- **To submit plans, make appointment with Development Review Division
(Olivia by fax 740-6380)**



- **Submit plans with Review Checklist & fee on scheduled date**
- **Upon receiving the plans, they are logged in, “G” number assigned, review fees deposited & file sent to reviewer**
- **Plan review is completed within nine days**



- **If the project is in Pima County, PCDOT also reviews plans for sewer/MH location in streets**
- **Red-lined drawings are passed on to Olivia, file processed, and drawings are picked up by engineer for correction**



- **Next submittal follows the same process as first submittal**
- **Process repeats until plans are approved**
 - Most of the time, plans get approved in 2 to 3 submittals



- **When plans are approvable, reviewer signs off, Olivia calls designer to submit mylar**
- **Mylars are reviewed, then signed by DOT & C.C. Patel; acceptance letter prepared & engineer is informed to arrange for pickup**



- **Accepted plans are good for two years, by state rule –
No extension is permissible**
- **Expired plans need to be submitted as a new project**
- **Review will be as if it was a new project**



- The next step is to get a [Construction Authorization \(CA\)](#) from Pima County Department of Environmental Quality
- Coordinate with David Amash at PDEQ and obtain this CA
 - David reviews plans to verify compliance with State standards



- **If any revision in accepted plans become necessary as a result of PDEQ review, the revision needs to be resubmitted to Development Review Division again for approval**
- **If any changes in plans become necessary during construction, follow RWRD procedure number: Engineering PN0016 (Procedure and Guidance for Approval of Field Changes) effective 1-1-06**



- **During construction, if revisions are needed in Approved Plans, they receive top priority for review and approval**

**Pima County Regional Wastewater
Reclamation Department**



**Public and Private
Sewer Projects –
Plan Submittal Process**

**David Amash, P.E.
Pima County
Department of
Environmental Quality**

**Developers Workshop
June 23, 2010**

Agenda



- **4.01 General Permit Applicability**
- **Submittal requirements for PDEQ**
- **Public and private sewer collection projects**
- **Construction Authorization and Discharge Authorization**



Sewer Collection Systems



Applicability: A 4.01 General Permit allows for construction and operation of a new sewage collection system or expansion of an existing sewage collection system involving new construction as follows:

- 1. A sewage collection system or portion of a sewage collection system that serves downstream from the point where the daily design flow is 3000 gallons per day based on Arizona Administrative Code R18-9, Table 1, Unit Design Flows, except a gravity sewer line conveying sewage from a single building drain directly to an interceptor, collector sewer, lateral, or manhole regardless of daily design flow;**
- 2. A sewage collection system that includes a manhole; or**
- 3. A sewage collection system that includes a force main or lift station serving more than one dwelling.**

– Arizona Administrative Code R18-9-E301.A

Public/Private Submittal Requirements



PUBLIC

- **Two (2) sets of folded plans signed by the appropriate wastewater utility (Designated Management Agencies “DMA”):**
 - DMA’s in Pima County
 - Pima County Regional Wastewater Reclamation Department (RWRD)
 - Town of Sahuarita



PRIVATE

- **Four* (4) sets of folded plans with the owner’s approval signature**
- * **PDEQ will return two (2) sets of plans to the engineering firm for submittal to building codes**

Public/Private Submittal Requirements



- **A check made payable to Pima County DEQ**
 - \$500 for 50 or fewer connections
 - \$1000 for 51 to 300 connections
 - \$1500 if 301 or more connections



Public/Private Submittal Requirements



- **Provide two (2) copies of the following documents**
 - Folded plans (two sets public/four sets private)
 - Notice of Intent to Discharge (NOID) application
 - Design Report
 - A312G request (a copy of letter from RWRD for approval of a variance)
 - RWRD Type III Capacity Allocation letter



Photo courtesy of the City of Phoenix

Public/Private Sewer Systems – A312.G



- If the sewer project will incorporate an alternative design, setback, installation or operational feature, you need to submit a completed A312.G request with the NOID and include an additional \$75 review fee.

Form F	
PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY REQUEST FOR APPROVAL OF ALTERNATIVE FEATURE OF TECHNOLOGY, DESIGN, SETBACK, INSTALLATION OR OPERATION PER A.A.C. R18-9-A312(G)	
Applicant Information: Project Name: _____ Applicant Name: _____ Applicant Address: _____ _____ _____	<i>For Agency Use Only</i> File No. _____ Fee Included <input type="checkbox"/> Yes <input type="checkbox"/> No (Review fee is \$75 per each requested change) Rec'd Date: _____
Agent Information: Name: _____ Address: _____ _____ Contact Phone No. _____ Fax _____	
1. Rule Citation of Requirement for Which Change Is Requested: _____	
2. Description of Requested Change:	
3. Justification for Requested Change (Please attach any necessary calculations, drawings or other supporting documentation):	
4. Signature of Requestor: _____ Date: _____	
REQUEST APPROVED: <input type="checkbox"/> Equal or better performance <input type="checkbox"/> Site or system conditions Addressed more satisfactorily	
Approved By _____ Title _____ Date _____	
REQUEST DENIED: <input type="checkbox"/> Not equal or better performance <input type="checkbox"/> Doesn't address site/system conditions better <input type="checkbox"/> Request insufficiently justified <input type="checkbox"/> Excessive review/research time needed <input type="checkbox"/> Adverse impact to environment/other permittees <input type="checkbox"/> Other _____	
Denied By: _____ Title: _____ Date: _____	

Private Sewer Collection Systems – Additional Submittal Requirements



- **Wastewater Treatment Facility Capacity Letter**
- **In addition to the above, if the project delivers wastewater to a private downstream collection system prior to being delivered to the Public Sewer Collection System, a capacity letter must also be submitted from the owner of the private system stating that the performance will be maintained pursuant to R18-9-E301.B**

Private Sewer Collection Systems – Additional Submittal Requirements



- [RWRD Acceptance Letter](#)
 - Any proposal to use private sewers must receive prior written approval from the RWRD
- OR*
- Documentation must be provided stating that a single company or individual will be responsible for the operation and maintenance of the sewers within the project. A Homeowners' Association (HOA) does not meet this requirement.

Private Sewer Collection Systems – Additional Submittal Requirements



In accordance with Arizona Administrative Code R18-9-E301.E., in addition to the Notice of Intent to Discharge requirements specified in R18-9-A301.C., an applicant shall submit a signed certification on a form approved by the department.

PDEQ has a generic template available on our website.

Operation & Maintenance (O&M) Plan Requirements:

- a. Confirms that an operation and maintenance manual exists for the sewage collection system;
- b. Confirms that the operation and maintenance manual addresses components of operation and maintenance specified on the certification form;
- c. Provides the 24-hour emergency number of the owner or operator of the sewage collection system; and
- d. Provides an address where the operation and maintenance manual is maintained and confirms that the manual is available for inspection at that address by the Department on request.

Guidance document for O&M plan available on PDEQ's website.

Sewer Collection Systems Construction Authorization (CA)



- **The CA is valid for two (2) years from the date issued**
- **If ADEQ/PDEQ does not receive all verification documents within two (2) years after the CA is issued, the CA will expire and the applicant shall not continue constructing the project or discharge into it**
- **The applicant shall submit a new Notice of Intent to Discharge (NOID), applicable fee and other required documents in order to receive a new CA and continue construction of the project**

Discharge Authorization



- **Pima County Public Sewer (RWRD)**
 - Discharge Authorization is issued by ADEQ, Southern Region Office, located in Tucson, AZ
 - Check with RWRD (520-740-6369 ask for permitting section) for submittal requirements

- **Town of Sahuarita and Private Sewer Projects**
 - Discharge Authorization is issued by PDEQ
 - Submit a completely filled out Request For Discharge Authorization, manhole/sewer test results (forms available on PDEQ web site) and As-built plans to 33 North Stone Ave., Suite 700, Tucson, AZ 85701
 - Private sewer projects will require the submittal of the Operation and Maintenance certification

Where to Submit Review Documents



- **Plan review documents can be submitted in person or by mail**
- **Pima County Department of Environmental Quality**
33 North Stone Ave.,
Suite 700
Tucson, AZ 85701-1317





CONTACT

Pima County Department of Environmental Quality

33 North Stone Ave., Suite 700

Tucson, Arizona 85701-1317

520-243-7400 FAX 520-243-7370

www.deq.pima.gov

Forms, Applications & Checklists



- PDEQ main website
www.deq.pima.gov
(Water Division)
- On-line plan submittal info
www.deq.pima.gov/water/sewercollsys.html
- PDEQ Office
33 North Stone Ave., Suite 700
Tucson, AZ 85701
520-243-7400
FAX 520-243-7370

The Web – www.deq.pima.gov



- What's new?
- Forms
- Regulations
- Checklists
- Links
- Contact information



**Pima County Regional Wastewater
Reclamation Department**



**RWRD
Sewer Construction
Permit Section**

**Yvonne Suarez
RWRD, Permitting
Section**

**Developers Workshop
June 23, 2010**

RWRD

Sewer Construction Permit Section



- **The Construction Permit Section has been relocated to the first floor of the Public Works Building**
- **Our department has consolidated RWRD permits process with Development Services**
- **We believe working in the same location with DSD will enhance our Customer Service**

RWRD

Sewer Construction Permit Section



- **Our section now covers all aspects of permitting having to do with any construction work on Pima County public sewer projects, developer projects, CIP, system rehabilitation, emergency repairs**
- **Once Field Engineering has accepted the project with an Engineer's Certificate of Completion (ECC) and "as-built", an owner's completion letter is sent requesting ADEQ fees of \$244.00, bill of sale, and affidavit of cost**

RWRD

Sewer Construction Permit Section



- **Upon ADEQ approval, a discharge authorization is issued and returned to RWRD Construction Permit Section**
- **Once administrative procedures have been completed, releases are issued**

New Public Sewer Construction



- When a permit is ready to be pulled, *the contractor who is performing the work must come in to sign the Regional Wastewater Reclamation Department Construction Application*
- ***An itemized Construction Cost Sheet*** of sewer work to be performed will be needed
 - The permit cost is 2.5% of the sewer bid total, plus an administration fee of \$25.00

New Public Sewer Construction



- **Permit expiration date is the same as Pima County Department of Environmental Quality Construction Authorization expiration date**
- ***PDEQ authorization to construct* shall be included or stamped on approved plans**
- **Five (5) sets of approved construction drawings are required**

New Public Sewer Construction



- **Current Certificates of Insurance are required**
- **The checks for permits are to be made payable to *Pima County Treasurer***
- ***Field Engineering requires 72-hour notice before work is to begin***

Small Construction Permit Process



- When a permit is ready to be pulled, *the contractor who is performing the work must come in to sign the Regional Wastewater Reclamation Department Construction Affirmation of Cost*
- One set of approved civil drawings (or site plan) is required
- The check is to be made payable to *Pima County Treasurer*

Small Construction Permit Process



- The expiration date is six (6) months from the date the permit is issued
- *Sewer construction may not begin prior to Field Engineering Notice To Proceed*
- *Field Engineering (520)740-2651 requires 72-hour notice before work is to begin*

Small Construction Permit Fees



Construction Activity	Fees
House Connection Sewer (HCS) tap of 12" or smaller diameter pipe	\$100.00
Large sanitary sewer tap (requires special approval)	\$150.00
Existing manhole tap	\$150.00
New manhole over existing sewer (without corrosion protection)	\$200.00
New manhole over existing sewer (with corrosion protection)	\$300.00
Manhole Adjustments, Manhole Reconstruction, Manhole Coating, DIP Replacement	Fee Based on Type of Work