

Charlotte County Purchasing Division 18500 Murdock Circle, Suite 344 Port Charlotte, Florida 33948-1094

Phone 941.743.1378

NOTICE OF AVAILABILITY

REQUEST FOR PROPOSALS CHARLOTTE COUNTY, FLORIDA

The County of Charlotte will be receiving sealed proposals at the Purchasing Division, Suite 344, Charlotte County Administration Center, 18500 Murdock Circle, Port Charlotte, FL 33948-1094, for:

RFP NO. 2024000597 BURNT STORE WATER RECLAMATION FACILITY (WRF) MAJOR DESIGN PERMIT MODIFICATION

Charlotte County is requesting proposals from qualified firms to provide professional services to complete a Major Permit Modification and provide a design to increase capacity to a minimum of 1.0 million gallons per day (MGD) for the Burnt Store WRF. Estimated Budget: \$750,000

There will not be a Pre-Submittal Conference for this project. Please send all questions to the email address below.

PROPOSAL DUE DATE: 3:00 p.m. (EST), OCTOBER 18, 2024 PURCHASING DIVISION CONFERENCE ROOM

Proposal Documents may be obtained by accessing the Charlotte County Purchasing Division's website at https://purchasingbids.charlottecountyfl.gov under "Purchasing Bids Online", document number 245972. Any questions can be answered by contacting Rhiannon Mills, Senior Contract Specialist at 941.743.1374, or email: Rhiannon.Mills@CharlotteCountyFL.gov

ELECTRONIC BID SUBMISSIONS: All submittals for this project shall be submitted electronically. Please visit http://bit.ly/3TYAyKa and follow given instructions.

Notice of Availability

Posted: September 19, 2024



Charlotte County Purchasing Division 18500 Murdock Circle, Suite 344 Port Charlotte, Florida 33948-1094

Phone 941.743.1378 Fax 941.743.1384

STATEMENT OF NO SUBMITTAL

If you **do not** intend to submit on this commodity/service, please return this form to the above address immediately. If this statement is not completed and returned, your company may be deleted from the Charlotte County Vendors' list for this commodity/service.

We, the undersigned, have declined to submit on requested commodity/service RFP #2024000597, BURNT STORE WATER RECLAMATION FACILITY (WRF) MAJOR DESIGN PERMIT MODIFICATION, for the following reason(s):

______ Specifications too "tight", i.e. geared toward one brand or manufacturer only (explain below).

_____ Insufficient time to respond to the Request for Proposal.

We do not offer this product or service.

	We do not offer this product or service.
	Our schedule would not permit us to perform.
	Unable to meet bond/insurance requirements.
	Unable to meet specifications.
	Specifications are unclear (explain below).
	Remove us from your vendors' list for this commodity/service.
	Other (specify below).
Remarks:_	
Company l	Name:
Contact Pe	erson (typed or printed):
Contact Pe	erson Signature:
Phone:	Fax:
E-Mail Add	lress:

Note: Statement of No Submittal may be emailed to Rhiannon.Mills@CharlotteCountyFL.gov

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REQUEST FOR PROPOSAL BURNT STORE WATER RECLAMATION FACILITY (WRF) MAJOR DESIGN PERMIT MODIFICATION RFP 2024000597

RP-01 INTENT:

- A. It is the intent of the County to select a firm who clearly demonstrates the highest level of ability and proven reliability to perform the professional services specified in the Scope of Services. Brief summaries applicable to the required work should be included with the proposal.
- B. **Time and Date Due -** Charlotte County will accept proposals from individuals, corporations, partnerships, and other legal entities authorized to conduct business in the State of Florida until **3:00 p.m., OCTOBER 18, 2024.**
- **RP-02 CONTRACT AWARDS:** The County anticipates entering into a contract with one (1) firm, who submit the proposal judged to be most advantageous to the County. The selected firm shall be required to sign a formal agreement in the standard form currently used by Charlotte County for professional services.

The proposer understands that this RFP does not constitute an agreement or a contract with the proposer. A proposal is not binding until proposals are reviewed and accepted by the Board of County Commissioners and a contract is executed by both parties.

- **RP-03 DEVELOPMENT COSTS:** The County shall not be liable for any expense incurred in connection with preparation of a response to this Request for Proposal (RFP). Proposers should prepare a straightforward and concise description of the proposers' ability to meet the requirements of the RFP.
- **RP-04 INQUIRIES:** The County will not respond to oral inquiries. Proposers may submit written or emailed inquiries regarding this RFP to Purchasing, 18500 Murdock Circle, Suite 344, Port Charlotte, Florida 33948 or Rhiannon.Mills@charlottecountyfl.gov. The County will respond to written or emailed inquiries received at least five (5) calendar days prior to the RFP due date.

The County will record its responses to inquiries and any supplemental instructions in the form of written addenda. It shall be the responsibility of the proposer, prior to submitting their proposals, to view the website https://purchasingbids.charlottecountyfl.gov to determine if addenda were issued, acknowledging and incorporating them into their proposal.

RP-05 PROPOSAL SUBMISSION AND WITHDRAWAL: The County will receive proposals electronically. Please visit http://bit.ly/3TYAyKa and follow given instructions.

Proposals received after the established deadline will not be opened. Proposers may withdraw their proposal by notifying the County in writing at any time prior to the due date. Proposals not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of 120 days to provide Charlotte County the services set forth in these specifications until one of the proposals has been accepted by the Board of County Commissioners. Upon opening, proposals become "public records" and shall be subject to public disclosure in accordance with Chapter 119, Florida Statutes.

RP-06 PROPOSAL RESTRICTIONS:

- A. In order to control the cost of preparation, submittals should be limited to a maximum of 50 pages, excluding cover letter, index, dividers, resumes, and the required forms.
- B. In accordance with Ordinance #96-002, the manufacture, use, display or other employment of any facsimile or reproduction of the Charlotte County Seal, without the express, prior, written approval of the Board of County Commissioners of Charlotte County, Florida, is hereby declared to be unlawful and punishable as a Second Degree Misdemeanor as provided in Section 165.043, Florida Statutes.
- **RP-07 DRUG FREE WORKPLACE**: Charlotte County is a Drug Free Workplace. It is strongly suggested that the attached Drug Free Workplace Form be signed and returned to this office with the proposal.
- **RP-08 PUBLIC ENTITY CRIMES STATEMENT:** In accordance with Florida Statutes Sec. 287.133(2)(a), "A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods/services to a public entity, may not submit a bid on a contract with a public entity for construction

or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a Contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for Category Two, for a period of 36 months from the date of being placed on the convicted vendor list".

RP-09 CANCELLATION/TERMINATION: The County shall have the right to unilaterally cancel, terminate or suspend this Contract, in whole or in part, by providing the successful proposer thirty (30) days written notice by certified mail.

It is expressly understood by the County and the Contractor that funding for any successive fiscal years is contingent upon appropriation of monies by the Board of County Commissioners. In the event funds are not available or not appropriated, the County reserves the right to terminate the Contract and/or individual leases. The County will be responsible for any outstanding invoices prior to the termination.

RP-10 RESERVED RIGHTS: The County reserves the right to accept or reject any and/or all proposals, to waive irregularities and technicalities, and to request resubmission. Any sole response received the first submission date may or may not be rejected by the County, depending on available competition and timely needs of the County. The County shall be the sole judge of the proposal and the resulting agreement that is in its best interest, and its decision shall be final.

The County reserves the right to accept or reject any or any part of the submissions, if it is deemed in the best interest of the County. The County, in its sole discretion, may expand the scope of work to include additional requirements. The County reserves the right to investigate as it deems necessary to determine the ability of any firm to perform the work or services requested. The firms, upon request shall provide information the County deems necessary in order to make a determination.

RP-11 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE: Charlotte County, Florida, in accordance with the provisions of Title VII of The Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all firms it will affirmatively ensure in any contract entered into pursuant to this advertisement, women-owned and minority business enterprises (collectively MBEs) will be afforded full opportunity to submit proposals in response to this advertisement and will not be discriminated against on the grounds of gender, race, color or national origin in consideration for an award. The County will consider the firm's status as an MBE or a certified MBE, and also the status of any sub-contractors or sub-consultants proposed to be utilized by the firm, within the evaluation process. Interested MBEs and certified MBEs are encouraged to respond.

All firms are hereby notified that the successful firms must and shall comply with the Civil Rights Act of 1964, the Age Discrimination in Employment Act, the Rehabilitation Act of 1973, the Americans with Disabilities Act and the Florida Civil Rights Act, all as amended. Specifically, firms agree that:

No person shall, on the grounds of race, color, sex, religion, age, disability, national origin or marital status, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program, activity or service funded through this Contract.

- Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, disability, national origin or marital status. Contractor agrees to post in a conspicuous place, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- Contractor will, in all solicitations or advertisements regarding program activities, services provided or applications for employment, state that all qualified applicants will receive consideration for services or employment without regard to race, color, religion, sex, age, disability, national origin or marital status.
- County may require Contractor to submit reports as may be necessary to indicate non-discrimination. County
 officials will be permitted access to Contractor's books, records, accounts and other sources of information and
 its facilities as may be pertinent to ascertain compliance with non-discrimination laws.

It is expressly understood that County shall have the right to terminate this Contract upon receipt of evidence of discrimination.

RP-12 PAYMENT: Request for payment must be submitted to Charlotte County Purchasing on a form approved by the County in accordance with contract documents. Price shall be net and all invoices payable according to the Local Government Prompt Payment Act (F.S.218.74).

RP-13 PERFORMANCE EVALUATION: At the end of the Contract, the receiving department will evaluate the successful proposers' performance. This evaluation will become public record.

RP-14 INSURANCE REQUIREMENTS: Contractor and subcontractors shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The County in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract by the Contractor, his agents, representatives, employees, or subcontractors. Contractor is free to purchase such additional insurance as may be determined necessary.

A. MINIMUM SCOPE AND LIMITS OF INSURANCE - Contractor shall provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis.

1. Commercial General Liability - Occurrence Form (CG 00 01)

Policy shall include bodily injury, property damage, broad form contractual liability and Explosion, Collapse and Underground (XCU) coverage.

General Aggregate \$2,000,000Each Occurrence \$1,000,000

- a. The policy shall be endorsed to include the following additional insured language: "Charlotte County a political subdivision of the state of Florida and it officers, employees, agents and volunteers" shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor.
- b. Contractor's subcontractors shall be subject to the same minimum requirements identified above.
- c. Policy shall be endorsed for a waiver of subrogation against the Charlotte County.

2. Automobile Liability

Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Contract. Automobile liability must be written on a standard ISO form (CA 00 01) covering any auto (Code 1), or if Contractor has no owned autos, hired (Code 8) and non-owned (Code 9) autos.

Combined Single Limit (CSL)

\$1,000,000

- a. The policy shall be endorsed to include the following additional insured language: "Charlotte County a political subdivision of the state of Florida and it officers, employees, agents and volunteers" shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".
- b. Contractor's sub-contractors shall be subject to the same minimum requirements identified in this section.
- c. Policy shall contain a waiver of subrogation against the Charlotte County.

3. Worker's Compensation and Employers' Liability

Workers' Compensation Statutory
Employers' Liability
Each Accident, bodily injury or disease \$1,000,000

- a. Policy shall contain a waiver of subrogation against the Charlotte County.
- b. Contractor's sub-contractors shall be subject to the same minimum requirements identified in this section.
- c. If the contractor has no employees the contractor must submit to the County the Workers Compensation Exemption from the State of Florida.

4. Professional Liability (Errors and Omissions Liability) for Prime Contractors

Estimated Projection Construction Cost up to \$9,999,999

Each Claim \$1,000,000

Annual Aggregate \$2,000,000

Estimated Projection Construction Cost from \$10,000,000 to \$19,999,999

Each Claim \$2,000,000

Annual Aggregate \$2,000,000

c. Estimated Projection Construction Cost from \$20,000,000 to \$40,000,000

\$3,000,000 \$3.000.000

- d. In the event that any professional liability insurance required by this Contract is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of five (5) years beginning at the time work under this Contract is completed.
- e. Policy shall contain a waiver of subrogation against Charlotte County.

5. Professional Liability (Errors and Omissions Liability) for Subcontractors

In addition to the insurance requirements for the Contractor, the contractor's registered sub-contractors (including structural, civil, mechanical, plumbing, electrical engineering, landscape architecture, survey, geotechnical and materials testing) are required to carry Professional Liability insurance at the same levels and conditions as the Contractor.

Additional Insured – All policies, except for the Workers Compensation and Professional Liability shall contain endorsements naming the County its officers, employees, agents and volunteers as additional insured with respect to liabilities arising out of the performance of services contained herein. The additional insured endorsements shall not limit the scope of coverage for the County to vicarious liability but shall allow coverage for the County to full extent provided by the policy, even if those limits exceed those required by this contract. Such additional insured coverage shall be at least as broad as Additional Insured (Form B) endorsement form ISO, CG 20 10 11 85 or both CG 20 10 and CG 20 37 if later revisions used.

<u>Waiver of Subrogation Rights</u> – The Contractor shall require the carriers of required coverages to waive all rights of subrogation against the County, its officers, employees, agents and volunteers. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. All general or auto liability insurance coverage provided shall not prohibit the Contractor and Contractor's employees or agents from waiving the right of subrogation prior to a loss or claim. The Contractor hereby waives all rights of subrogation against the County.

<u>Policies Primary and Non-Contributory</u> – For any claims related to this contract, the Contractor's insurance coverage shall be primary insurance as respects the County, its officers, employees, agents and volunteers. Any insurance or self-insurance maintained by the County, its officers, employees, agents or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

<u>Severability of Interests –</u> The Contractor agrees to ensure that coverage provided to meet these requirements is applicable separately to each insured and there will be no cross liability exclusions that preclude coverage for suits between the Contractor and the County or between the County and any other insured or additional insured under the policy.

<u>Proof of Coverage</u> - Prior to the commencement of performance of services the Contractor shall furnish to the <u>County Purchasing Division</u> Certificates of Insurance and amendatory endorsements or copies of the applicable policy language effecting coverage required. These certificates shall provide that such insurance shall not be terminated or expire without notice thereof in accordance with the policy provisions and Contractor shall maintain such insurance from the time the Contractor commences performance of services until completion of such services. Within seven (7) calendar days of notice of award, the Contractor shall furnish a copy of the Declaration page and required endorsements for all applicable policies and will provide complete certified copies of the policies and endorsements immediately upon request.

<u>Acceptability of insurance carrier</u> – Unless otherwise approved by Risk Management, Insurance shall be written by insurers authorized to do business in the State of Florida and with a minimum Best Insurance Guide rating of "A:VII".

<u>Deductibles and Self-Insured Retention</u> – Any and all deductibles or self-insured retentions in excess of \$10,000 shall be declared to and approved by Risk Management. The County may require the Contractor to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration and defense expenses within the deductible or retention.

<u>Failure to Procure Coverage</u> – In the event that any policy of insurance required under this contract does not comply with the requirements, is not procured or is cancelled and not replaced, the County has the right but not the obligation or duty to terminate the contract or obtain insurance if it deems necessary and any premiums paid by the County will be promptly reimbursed by the Contractor or County payments to the Contractor will be reduced to pay for County purchased insurance.

<u>Insurance Review</u> – Insurance requirements are subject to periodic review by the County. The Risk Manager or designee is authorized, but not required, to reduce, waive, or suspend any insurance requirements whenever Risk Management determines

that any of the required insurance is not available, is unreasonably priced or is not needed to protect the interests of the County. In addition, if Risk Management determines that heretofore, unreasonably or unavailable types of insurance coverage or coverage limits become reasonably priced or available, the Risk Manager or designee is authorized, but not required, to change the above insurance requirements to require additional types of insurance coverage or higher coverage limits, provided that any such change is reasonable in light of past claims against the County, inflation, or any other item reasonably related to the County's risk. Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this contract. Contractor agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual, or alleged, on part of the County to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of the County.

RP-15 UNAUTHORIZED ALIEN WORKERS: Charlotte County will not intentionally award publicly-funded contracts to any contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contains in 8 U.S.C. Section 1324a [Section 274A of the Immigration and Nationality Act ("INA")]. The County shall consider employment by any Contractor of unauthorized aliens a violation of Section 274A of the INA. Such violation by the Contractor of the employment provisions contained in Section 274A of the INA shall be grounds for termination of this Agreement by the County. In addition, pursuant to Section 448.095 of the Florida Statutes, all persons or firms entering into contracts with Charlotte County are required to register with, and use, the E-Verify system of the U.S. Department of Homeland Security to electronically verify the employment eligibility of all newly hired employees. The County may terminate this Agreement for failure on the part of the Contractor to use E-Verify. Contract termination for failure to use E-Verify is not considered a breach of contract pursuant to s. 448.095(2)(c)3, *Fla. Stat.*

RP-16 EMPLOYEE BACKGROUND CHECK: If an owner, except a stockholder in a publicly traded corporation, or an employee of the Contractor has been convicted of any offenses requiring registration as a sexual offender or sexual predator, regardless of the location of conviction, the Contractor shall ensure that the offender's or predator's work on the project is consistent with the terms of his probation and registry requirements.

RP-17 PUBLIC RECORDS CLAUSE TO CONTRACTORS "ACTING ON BEHALF OF THE COUNTY": Pursuant to Section 119.0701 of the Florida Statutes, Contractors acting on behalf of the County must comply with the public records laws, specifically: a) keep and maintain public records required by the County to perform the contracted services; b) upon request from the County's custodian of public records, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119 of the Florida Statutes or as otherwise provided by law; c) ensure that public records that are exempt or confidential from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract; and d) upon completion of the contract, keep and maintain all public records required by the County to perform the service, and meet all applicable requirements for retaining public records.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO RETAIN AND PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE COUNTY'S CUSTODIAN OF PUBLIC RECORDS AT (941) 743-1441, E-MAIL TO RECORDS@CHARLOTTECOUNTYFL.GOV, 18500 MURDOCK CIRCLE, BLDG. B, Suite 109, PORT CHARLOTTE, FLORIDA 33948.

RP-18 SOCIAL, POLITICAL, OR IDEOLOGICAL INTERESTS: Charlotte County will not request documentation of, or consider a vendor's social, political, or ideological interests when determining if the vendor is a responsible vendor. Charlotte County does not give preference to vendors based on social, political, or ideological interests.

END OF PART I

PART II SCOPE OF SERVICES

RP-19 PROJECT DESCRIPTION: Charlotte County is requesting proposals from qualified firms to provide professional services to complete a Major Permit Modification and provide a design to increase capacity to a minimum of 1.0 million gallons per day (MGD) for the Burnt Store Water Reclamation Facility (WRF).

Responses to this Request for Proposal (RFP) will be reviewed by the County with the intent to enter into an agreement with a single firm whose submitted and demonstrated responses illustrate the highest level of knowledge and ability to perform the tasks described herein.

RP-20 BACKGROUND: The South County wastewater utility system was acquired from Southern States Utilities in 2003 and originally included 1,273 sewer connections, one deep injection well, and the Burnt Store WRF. With the recent improvements to Burnt Store Road, the area has seen increased growth requiring upgrades and improvements to the utility systems to maintain services to our customers.

Charlotte County has recently completed a design for a new plant expansion for the Burnt Store WRF TO 2.5 MGD, however this project has been determined to be cost prohibitive for the County within the current market.

RP-21 SCOPE OF SERVICES: The scope for this project will include the following:

Evaluation

- Evaluate and review options to increase plant capacity to a minimum of 1.0 MGD.
 - o Present options to CCU staff in review meeting.
 - o Consider incorporation of CMAR for construction review/pricing.
 - Include schedule of completion for each option.
 - Include cost estimates for each option.
 - o Complete evaluation and present options within 30 days of Notice to Proceed.

Major Permit Modification

- Complete Major Modification to Burnt Store WRF Permit.
 - o Schedule and meet with FDEP to review major permit modification.
 - Complete meeting with FDEP within 30 days from determination of selected option.

Design

- Complete design to facilitate increase of plant capacity within 120 days.
 - Complete contract bid documents and technical specifications utilizing CCU design compliance standards dated November 1, 2011, and updates.
- Assist Charlotte County during the bidding phase and Contractor selection.
- Provide construction administration and inspection services as requested by CCU.
- Finalize a detailed operational/maintenance manual for these facilities.
- Provide assistance to CCU staff during the initial start-up of these facilities.
- Additional services as identified within the scope of services.
- Present design to the Charlotte County Board of County Commissioners.

General

- Incorporate County SCADA standards and approved instrumentation into proposed design.
- Consider state of the art and best practices consistent with existing CCU standards, equipment, software, and systems.
- Assessment of alignment with current industry standards where appropriate.
- Assessment of alignment with current regulations, at local, state, and federal levels, including building code.
- Obtain/modify/renew FDEP, SWFWMD, local zoning, and any other federal, state, or local permits required.
- Field surveys.
- Subsurface utility engineering (SUE) as necessary.
- Geotechnical investigations and recommendations for tank support.
- Preliminary plan submittals for review (30, 60, 90 percent completion).
- Erosion Control Plans.
- An Engineer's Opinion of Probable Construction Cost for each phase of the design.
- Site planning and analysis with public interaction.
- Maintain compliance with regulatory agencies including but not limited to, FAA, TCEQ.
- Public Outreach including attending public information meetings and construction notification.

- Original and digital submittal of record drawings including plans, shape files, and CAD drawing
- Conduct extensive meetings with CCU Operations and Engineering staff to ensure needs are met in relation to any
 recently completed projects and revise plans and specifications accordingly. Changes that could occur through this
 process could include:
 - Update in preferred manufacturers
 - o Updated instrumentation and control system layout
 - Changes in plant operations
 - Update in traffic patterns

Construction Engineering, Administration, and Inspection (CEI) Services

- Provide construction engineering and inspection services as needed (CCU staff will provide daily inspection) including
 coordinating construction progress meetings, assisting with value engineering areas of contract modifications, review
 of shop drawings and submittals, site visit coordination, certification of the facility for FDEP permitting, preparation of
 record drawings and other duties as determined.
- Provide services for compliance as required by local, state, or federal funding agencies such as Davis Bacon Act and American Iron and Steel Act.
- Finalize a detailed operational/maintenance manual and provide training for these facilities.
- Provide necessary technical support and other assistance to CCU staff during the initial start-up of these facilities.
- Additional services as needed and identified during execution of scope of services.

END OF PART II

PART III PROPOSAL FORMAT & EVALUATION METHOD

RP-22 RULES FOR PROPOSALS:

- A. The proposal must name all persons or entities interested in the proposals as principals. The proposal must declare that it is made without collusion with any other person or entity submitting a proposal pursuant to this RFP.
- B. The following is an excerpt from Charlotte County Resolution #2011-221 and applies to this proposal: "Any questions regarding a project or submittal shall be directed to the designated person in the Purchasing Division for a response. From the time the notice of request for proposals is published until the contract is awarded, there shall not be any contact between a proposer, agent or other representative and any member of the selection committee, user department, Administration, or any member of the Board of County Commissioners regarding the project or proposal submitted by any proposer. Should any member of the selection committee initiate contact or fail to report any contact, such committee member may be subject to disciplinary action up to and including dismissal. If any proposer, agent or other representative contacts any committee member, user department, Administration or member of the Board of County Commissioners regarding a request for proposals or submitted proposal, the proposer is subject to sanctions up to and including having the County disqualify the firm's submittal."
- C. For your information, the members of the Professional Services Committee for this project are as follows:

Ken Stecher, Operations Manager – Utilities Travis Perdue, Director – Facilities Joanne Vernon, County Engineer – Public Works

RP-23 PROPOSAL FORMAT: Firms shall prepare their proposals using the format outlined in the Consultant Evaluation Form on pages 13 and 14.

RP-24 PROPOSAL REQUIREMENTS: In addition to the information required in the Consultant Evaluation Form, provide the following information:

- A. Team Organization, Management and General Qualifications Multiple firm or joint venture teams should clearly identify the roles and responsibilities of the proposed participants. Team and project management structure should be documented. The principal within the prime firm responsible for the project and the proposed project manager should be identified and a statement presented that those persons would not be substituted without the express permission of the County. Teams should demonstrate experience in previous similar projects.
- B. Work Plan Firms submitting should demonstrate their understanding of the project. An outline description of anticipated project tasks in sequence should be prepared. Firms should identify anticipated deliverables and a general schedule for a project of this magnitude.
- C. Individual Qualifications Firms should submit the resumes of key people. Firms should specifically identify the Project Manager on the project and his/her qualifications. Provide a statement indicating that the Project Manager will not be substituted without the express permission of the County.
- D. Experience and References Supply materials indicative of experience in other projects of similar complexity. A reference list for each firm is required, including name, project and telephone number. A reference list for the Project Manager is required identifying name, project and telephone number.

Proposals are to be typed on the firm's letterhead, specifically referring to the project and the scope of services, containing all required information. That information is to be submitted electronically. Please visit http://bit.ly/3TYAyKa and follow given instructions.

RP-25 EVALUATION METHOD AND CRITERIA:

A. General - The County shall be the sole judge as to the merits of the proposal, and the resulting agreement. The County's decision will be final. **Please note that proposals will be evaluated on content,** *not bulk.*

The County's evaluation criteria will include, but shall not be limited to, considerations listed on **Proposal Requirements**, **pages 11**. As mentioned in PROPOSAL FORMAT, the proposals should be prepared using the format outlined in the Consultant Evaluation Form on pages 13 and 14.

B. Selection - The Professional Services Committee shall evaluate the proposals submitted. Telephone discussions will

be held with all firms submitting and a short list of firms from proposals will be ranked in order. Final approval will be by the Board of County Commissioners who may request public presentation.

RP-26 ANTICIPATED SCHEDULE: The projected schedule of events for this proposal is as follows:

09/19/24	County advertises for proposals
10/18/24	Proposal due date
11/05/24	Professional Services Committee short lists firms

CONSULTANT EVALUATION FORM CHARLOTTE COUNTY, FLORIDA

RFP# 2024000597, BURNT STORE WATER RECLAMATION FACILITY (WRF) MAJOR DESIGN PERMIT MODIFICATION

MODIFICATIO	N	1		
Evaluation Criteria	Value	Assigned Value	Weight	Score
I. TEAM PROPOSED FOR THIS PROJECT				
A. Background of the personnel				
1. Project Manager	1-5		X 10	
2. Other Key Personnel				
3. Consultants				
II. PROPOSED MANAGEMENT PLAN				
A. Team Organization	4 5		V 10	
1. Design Phase	1-5		X 10	
Construction Phase				
III. PREVIOUS EXPERIENCE OF TEAM PROPOSED FOR				
THIS PROJECT	1-5		X 15	
A. Describe projects that relate to the work described herein.				
IV. PROJECT CONTROL				
A. Schedule				
What techniques are planned to assure that schedule				
will be met?				
Who will be responsible to assure that schedule will be				
met?	1-5		X 10	
B. Cost				
What control techniques are planned?				
Demonstrate ability to meet project cost control.				
Who will be responsible for cost control?				
C. Recent, current and projected workload				
V. PRESENT PROPOSED DESIGN APPROACH FOR THIS				
PROJECT				
A. Describe approach proposed to complete project.	1-5		X 20	
B. What problems do you anticipate and how do you propose to	1-5		7 20	
solve them?				
C. Describe innovative approaches used.				
VI. PRESENT EXAMPLES OF RECENTLY ACCOMPLISHED				
SIMILAR PROJECTS				
A. Describe the projects to demonstrate.	1-5		X 12	
Schedule control.				
2. Cost control.				
3. Any additional costs caused by changes during project.				
VII. DESCRIBE YOUR EXPERIENCE AND CAPABILITIES IN				
THE FOLLOWING AREAS.				
A. Cost evaluations/comparisons.				
B. Risk Assessment Analysis	0-5		X 20	
C. Facility Expansions				
D. Asset / Data Management				
E. FDEP Permit Major Modifications				
F. Any other Specialized Experience pursuant to this RFP				
VIII. VOLUME OF WORK – TOTAL OF PAYMENTS RECEIVED FROM COUNTY WITHIN THE PAST 24 MONTHS*				
\$0 - \$49,999 5 points \$50,000 - \$99,999 4 points				
	0-5		X 01	
\$350,000 - \$499,999				
\$500,000 + 0 points *Based upon information provided on Proposal Submittal				
Signature Form, Magnitude of Charlotte County Projects.				
Signature Form, Magnitude of Chanotte County Projects.				

13

RFP No. 2024000597

IX. LOCATION Describe the Prime and Sub-Consultants responsiveness as it relates to the firm's location to the project.	1-5		X 01	
X. LITIGATION – HAVE YOU BEEN NAMED AS A DEFENDANT OR CO-DEFENDANT IN A LAWSUITE IN THE LAST FIVE YEARS? If so, describe circumstances and outcome, including Case Number, Case Name and Court.	1-5		X 01	
XI. MINORITY BUSINESS Certified MBE, Sub-Consultants Certified MBE, and/or Non-Certified MBE.	Yes or No			

REMARKS: The value assigned in judged on a scale of 1 through 5, with 5 being the highest possible value. The two exceptions are: **VIII. Volume of Work**; and **XI. Minority Business. Category VIII. Volume of Work** has a value of 0 through 5 as indicated, and **Category XI. Minority Business** – The County will consider the firm's status as an MBE or a Certified MBE, and also the status of any sub-contractors or sub-consultants proposed to be utilized by the firm, within the evaluation process.

END OF PART III

PART IV - SUBMITTAL FORMS PROPOSAL SUBMITTAL SIGNATURE FORM

1.	Project Tea Name and Ti		Years experience	City of individua work out this proje	l will of for	City individual's office is normally located	City of individual's residence
2.	Magnitude of Company Op	erations		l			
	A) Total professional service	es fees received wit	hin last 24 montl	ns:		\$	
	B) Number of similar projects	s started within last	24 months:				
	C) Largest single project to c	date:				\$	
3.	Magnitude of Charlotte County Projects						
	A) Number of current or sche	eduled County Proj	ects				
	B) Payments received from t executed contracts with the		e past 24 months	(based upo	on	\$	
4.	Sub-Consultant(s) (if applicable)	Location		Work to rovided		Services to be I	Provided
5.	Disclosure of interest or in contract and who have an in held by your firm, or officers	nterest within the a	reas affected by	this project	t. Also,	whom you have include any prop	an active pending perties or interests
	Firm	Addre	ess				
	Phone #	Conta	Contact Name				
	Start Date	Endin	ig Date				
	Project Name/Description						

NAME OF FIRM	
· -	(This form must be completed and returned)

6. Minority Business: The County will consider the firm's status as consultants proposed to be utilized by the fi				Yes _ also the status of any	Nosub-contractors or sub-
Comments or Additional Information:	,	•			
The undersigned attests to his/her authority to if the firm is awarded the Contract by the C Proposal, Terms and Conditions, Insurance proposal is submitted with full knowledge and	ounty. The un Requirement	ndersigned s and any o	further o	certifies that he/she hocumentation relating	as read the Request for to this request and this
By signing this form, the proposer hereby dec submitting a proposal pursuant to this RFP.	clares that this	proposal is	made w	rithout collusion with a	any other person or entit
In accordance with section 287.135, Florida Companies with Activities in Sudan List, the and does not have business operations in C or is not participating in a boycott of Israel.	Scrutinized Co	ompanies w	ith Activ	ities in the Iran Petro	leum Energy Sector Lis
As Addenda are considered binding as if conreceipt of same. The submittal may be consi					
Addendum No Dated Add	endum No	Dated		Addendum No	Dated
Addendum No Dated Add	endum No	Dated		Addendum No	Dated
Type of Organization (please check one):	INDIVIDU/ CORPOR/		() ()	PARTNERSHIP JOINT VENTURE	(_) (_)
Firm Name			Telep	hone	
Fictitious or d/b/a Name			Feder	al Employer Identifica	ition Number (FEIN)
Home Office Address					
City, State, Zip			Numb	er of Years in Busine	ss
Address: Office Servicing Charlotte County,	other than abo	ove			
Name/Title of your Charlotte County Rep.			Telep	hone	
Name/Title of Individual Binding Firm (Please	Print)				
Signature of Individual Binding Firm			Date		
Email Address					

(This form must be completed & returned)

DRUG FREE WORKPLACE FORM

The u	ndersigned vendor in accordance with Florida Statute 287.087 hereby certifies that
	does: (name of business)
1.	Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use o a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2.	Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3.	Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4.	In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5.	Impose a sanction on or require the satisfactory participation in a drug abuse assistance or rehabilitation program i such is available in the employee's community, by any employee who is so convicted.
6.	Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.
As the	e person authorized to sign the statement, I certify that this firm complies fully with the above requirements.
	Province of Oliverture
	Proposer's Signature
	Date

(This form must be completed & returned)

HUMAN TRAFFICKING AFFIDAVIT for Nongovernmental Entities Pursuant To FS. §787.06

Charlotte County Contract #2024000597

The undersigned on behalf of the entity listed below, (the "Nongovernmental Entity"), hereby attests under penalty of perjury as follows:

- 1. I am over the age of 18 and I have personal knowledge of the matters set forth except as otherwise set forth herein.
- 2. I am an officer or representative of the Nongovernmental Entity and authorized to provide this affidavit on the Company's behalf.
- 3. Nongovernmental Entity does not use coercion for labor or services as defined in Section 787.06, Florida Statutes.
- 4. This declaration is made pursuant to Section 92.525, Florida Statutes. I understand that making a false statement in this declaration may subject me to criminal penalties.

Under penalties of perjury, I declare that I have read the foregoing Human Trafficking Affidavit and that the facts stated in it are true.

Further Affiant sayeth naught.	
Signature	
Printed Name	
Title	
Nongovernmental Entity	
Date	

END OF PART IV

(This form must be completed & returned)

Prepared by: AECOM Fort Myers, FL 60162415 March 2011

Charlotte County Utilities



Burnt Store Water Reclamation Facility



Re-rating Permitted Capacity
Final Technical Memorandum

Ronald R. Cavalieri, PE, BCEE

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Appendix A – Current DEP Permit for Burnt Store WRF Appendix B
Acronyms

1.0 Background

The Burnt Store Water Reclamation Facility (WRF) serves the Burnt Store community located in Charlotte County and Lee County. The WRF is located at 17430 Burnt Store Road in Punta Gorda, and the Burnt Store Water Treatment Plant (WTP) is also located at this address. The existing Burnt Store WRF was expanded in June 2007 to 0.5 million gallons per day (mgd) permitted capacity on an annual average daily flow basis (AADF). The WRF is a domestic wastewater treatment plant that includes two ring steel type tanks (containing the biological treatment process, clarifiers, and biosolids storage), a flow equalization tank, disk filters, chlorine contact chambers, percolation ponds and reclaimed water reuse storage ponds. The treated effluent is reused for public access irrigation via a reclaimed water pumping and reuse system. When the demand for reuse is less than supply, the treated effluent can also be disposed of in the on-site percolation ponds and/or deep injection wells.

2.0 Purpose and Scope

Charlotte County Utilities wishes to re-rate the present permitted capacity of 0.5 mgd at the Burnt Store WRF to approximately 0.8 mgd to 1.0 mgd. The services for the 2.5 mgd WRF expansion under the Boyle contract in 2008 were suspended by Charlotte County due to reduced demand for wastewater treatment capacity, and instead Charlotte County has requested that AECOM (formerly Boyle) perform a study on re-rating the permitted capacity of the WRF as an interim step in the overall expansion project.

The purpose of this Technical Memorandum is to identify the recommended improvements that will be completed to re-rate the Burnt Store WRF permitted capacity from 0.5 mgd to approximately 0.8 mgd to 1.0 mgd through limited improvements. AECOM's work will include the following:

- Perform a site visit and evaluate the current structures at the WRF
- Perform a re-rating evaluation
- Prepare a Technical Memorandum (TM) detailing the improvements needed for rerate

The requirements for these improvements are detailed in this Technical Memorandum. Once the TM is approved by CCU, AECOM will prepare an Engineering Report (ER) and a Department of Environmental Protection (DEP) permit application package requesting an increase in permitted capacity. The ER and DEP permit application shall be submitted to the local DEP office for approval.

3.0 Existing Facility

AECOM reviewed record drawings provided by the County and conducted a site visit on September 22nd to the Burnt Store WRF to determine the existing conditions of the structures. The Process Flow Diagram (PFD) for the existing WRF is presented in Figure 1. This PFD also shows where the compliance sampling points and flow measurement points are located. The existing WRF consists of the following components:

- Headworks (manual bar screen)
- Flow Equalization
- Extended Aeration
- Clarification
- Aerobic Digestion
- Disk Filter
- Chlorine Contact
- Effluent Chamber
- Reuse System
- Percolation Ponds
- Deep Injection Wells

Overall, the components of the WRF are in good, working condition. A description of each component is provided below:

3.1 Headworks

The headworks at the Burnt Store WRF is a manual bar screen. The influent flow goes through the bar screen then into the flow equalization basin. The bar screens are manually cleaned by the operators on a regular basis. The headworks is equipped with a bypass channel to ensure operation of the plant when the headworks needs to be serviced. A photograph of the bar screen is presented in Figure 2.

3.2 Flow Equalization

The flow equalization basin at the Burnt Store WRF is a circular, steel tank. The flow equalization basin has a volume of 100,000 gallons. The basin is aerated by air diffusers. Flow is pumped from the equalization basin to extended aeration. There is a 12-inch bypass to enable the flow equalization basin to be serviced while keeping the plant on-line. A photograph of the flow equalization basin is presented in Figure 3.

3.3 Extended Aeration

The extended aeration basins are circular, steel tanks. There are two aeration basins, each with a volume of 150,000 gallons and air diffusers located in multiple sections. The total aeration volume is 300,000 gallons. Each basin can be bypassed for maintenance or repair. A photograph of the extended aeration basins are presented in Figure 4, and a photograph of the blowers are presented in Figure 5. After aeration, flow is sent to clarification.

3.4 Clarification

There are two 33.5-foot diameter clarifiers each with a volume of 86,740 gallons (for a total volume of 173,480 gallons). The clarifiers function in parallel. A photograph of the clarifiers is presented in Figure 6.

3.5 Aerobic Digestion

Sludge is wasted to the aerobic digester by the waste activated sludge (WAS) pumps. Part of the sludge is returned to the aeration basins by the return activated sludge (RAS) pumps. Sludge is aerated, sent to the decanter digester, stabilized with lime, and allowed to thicken. Then the stabilized residuals are hauled off-site by a contracted sludge hauler. Supernatant from the digester flows by gravity to the plant lift station. A photograph of the aerobic digester is presented in Figure 7, and a photograph of the WAS and RAS pumps are presented in Figure 8.

3.6 Disk Filter

The disk filter consists of four disks. The disks are made of cloth-media, and the manufacturer is Aqua-Aerobic Systems, Inc. Backwash is provided by two backwash pumps, and these pumps are also used for removing the solids from the filter and bottom of the filter chamber. These solids are pumped to the plant lift station. After filtration, the effluent goes to chlorine contact. For TSS control, a coagulant can be injected into the filter influent line just before discharge into the filter, but the TSS limitations are currently being met without the addition of a coagulant. In case of filter overflow, effluent can be bypassed to chlorine contact. A photograph of the disk filter is presented in Figure 9. The filter is expandable to six disks.

3.7 Chlorine Contact

There are two chlorine contact chambers; each has a volume of 8,700 gallons, for a total volume of 17,400 gallons. The chambers function in parallel and include baffles for plug flow conditions. Effluent is chlorinated with sodium hypochlorite at the chamber inlet prior to flowing through open channel ports. Each chamber has an aluminum slide gate to close off flow for maintenance and repair. The sodium hypochlorite is stored in dual contaminant tanks and has a total volume of 2,300 gallons. A photograph of the chlorine contact is presented in Figure 10, and a photograph of the sodium hypochlorite storage is shown in Figure 11.

3.8 Effluent Chamber

After chlorine contact, the effluent flow goes to the effluent chamber. The effluent chamber has a volume of 4,291 gallons. From the effluent chamber, flow either goes to the reuse

system, the percolation ponds, or the deep injection well. A photograph of the effluent chamber is presented in Figure 12.

3.9 Reuse System

The reuse sump has a volume of 6,461 gallons. Two vertical turbine pumps are used to pump the effluent from the sump into the reuse system for use. A photograph of the reuse sump and pumps is shown in Figure 13.

3.10 Percolation Ponds

The Burnt Store WRF has four percolation ponds with a permitted capacity of 0.250 mgd annual average daily flow (AADF). The ponds are used in a rotation as to not overload. The total estimated area of the four ponds is 13.1 acres. The percolation ponds are used as a secondary effluent disposal system. A photograph of one of the percolation ponds is presented in Figure 14.

3.11 Deep Injection Wells

Deep injection well, IW-1, has a permitted capacity of 0.564 mgd at a maximum injection rate of 392 gpm. The well is a Class 1 underground injection well that discharges to Class G-IV ground water. The permit number for the well is 44562-020-UO. IW-1 injection is to the Oldsmar Formation. IW-1 is used as the primary means of disposal of non-hazardous reverse osmosis concentrate from the Burnt Store WTP and non-hazardous secondary treated domestic wastewater from the WRF.

Deep injection well IW-2 has a permitted capacity of 9.71 mgd at a maximum injection rate of 6,744 gpm. The well is a Class 1 underground injection well that discharges to Class G-IV ground water. The permit number for the well is 271367-001-UC1M. IW-2 injection is to the Oldsmar Formation. IW-2 is used as the primary means of disposal of non-hazardous reverse osmosis concentrate from the Burnt Store WTP and non-hazardous secondary treated domestic wastewater from the WRF.

A photograph of deep injection well IW-2 is presented in Figure 15.

4.0 Process Design Criteria for Existing Structures

The DEP effluent criteria for the Burnt Store WRF are presented below in Table 1 for the reuse system, percolation ponds, and underground injection well. The criteria are set forth in the Burnt Store WRF Domestic Wastewater Facility Permit FLA 014083. A copy of the current permit is included in Appendix A.

Table 1 DEP Effluent Criteria

		Undergrou	nd Injectio	n Well		Shirt ships	2 ¹⁰ F. Su
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency
Flow	mgd	Maximum	Report	0.564	-	-	5 days/week
BOD, Carbonaceous 5 day	mg/l	Maximum	20.0	30.0	45.0	60.0	Weekly
Solids, Total Suspended	mg/l	Maximum	20.0	30.0	45.0	60.0	Weekly
pН	SU	Range	-	<u>.</u>	-	6.0 to 8.5	5 days/week
		Perco	lation Pon	ds			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency
Flow	mgd	Maximum	0.250	Report	_	-	5 days/week
BOD, Carbonaceous 5 day	mg/l	Maximum	20.0	30.0	45.0	60.0	Weekly
Solids, Total Suspended	mg/l	Maximum	20.0	30.0	45.0	60.0	Weekly
pН	SU	Range	-	-	_	6.0 to 8.5	5 days/week
Coliform, Fecal (bacteria)	#/100ml	Maximum	S	ee Permit Co	ondition I.B.4		Every two weeks
Total Residual Chlorine	mg/l	Minimum	-	-	_	0.5	5 days/week
Nitrogen, Nitrate, Total (as N)	mg/l	Maximum	_	-	_	12.0	Every two weeks
		Rei	use System				
			Annual	Monthly	Weekly	Single	Monitoring
Parameter	Units	Max/Min	Average	Average	Average	Sample	Frequency
Flow	mgd	Maximum	1.030	Report	_	-	5 days/week
BOD, Carbonaceous 5 day	mg/l	Maximum	20.0	30.0	45.0	60.0	Weekly
Solids, Total Suspended	mg/l	Maximum	-	-	-	5.0	Daily
pН	SU	Range	-	-	-	6.0 to 8.5	5 days/week
Coliform, Fecal, % less than detection	PERCENT	Minimum	See Permit Condition I.B.10 Daily				Daily
Coliform, Fecal (bacteria)	#/100ml	Maximum	See Permit Condition I.B.10 Daily				Daily
Total Residual Chlorine	mg/l	Minimum	-			1.0	Continuous
Turbidity	NTU	Maximum	S	ee Permit Co	ndition I.B.1	2	Continuous
Giardia	CYSTS/ 100L	Maximum	_		~-	Report	Every five years
Cryptosporidium	CYSTS/ 100L	Maximum	-		_	Report	Every five years

The design criteria for the existing Burnt Store WRF are detailed below in Table 2 for each process.

Table 2 Design Criteria

Design Parameter	Design Value			
Annual Average Daily Flow (AADF)	0.50 mgd			
Peak Hour Flow (PHF)	1.0 mgd			
Influent Flow Metering				
Туре	Magnetic Flow Meter			
No. of Units	1			
Size	4 inch			
Screening				
Туре	Manually Cleaned Bar Screen			
No. of Units	1			
Flow Equalization				
No. of Tanks	1			
Dimension/Tank	Diameter of 33'6" and SWD of 15'2"			
Total Capacity	100,000 gallons			
No. of Flow Equalization Pumps	2			
Ритр Туре	Variable Frequency Drive			
Pump Capacity	400 gpm @ max speed			
No. of Blowers	1			
Blower Capacity/Discharge Pressure	307 cfm/13 psi			
Blower Motor Horsepower	20 HP			
Aeration Basins				
No. of Basins	2			
Aeration Volume/Basin	150,000 gallons			
Total Aeration Volume	300,000 gallons			
Detention Time @ AADF	14.4 hours			
No. of Blowers	3			
Blower Capacity/Discharge Pressure	1361 cfm/8 psi			
Blower Motor Horsepower	75 HP each			
Diffuser Type	Coarse Bubble			
MLSS	4,000 mg/L			
F:M	0.13			
MCRT	21.2			

Clarifiers			
No. of Clarifiers	2		
Volume/Clarifier	86,740 gallons		
Total Clarifier Volume	173,480 gallons		
Surface Area/Clarifier	881.4 ft ²		
Weir Length	192 ft		
Detention Time @ AADF	8.33 hours		
Weir Overflow Rate @ PHF	2,604 gpd/ft		
Surface Loading Rate @ PHF	568 gpd/ft ²		
No. of Sludge Pumps	2		
Sludge Pump Capacity Range	434 gpm		
Sludge Pump Horsepower	7.5 HP each		
Filtration			
Туре	Aqua-Aerobics		
No. of Disks	4		
Surface Area/Disk	53.8 ft ²		
Total Filtration Surface Area	215.2 ft ²		
Filter Loading @ AADF	1.61 gpm/ft ²		
Filter Loading @ PHF	3.23 gpm/ft ²		
No. of Backwash Pumps	2 (alternating standby)		
Backwash Pump Capacity	130 gpm		
Backwash Pump Horsepower	2 HP each		
Chlorine Contact			
No. of Tanks	2		
Dimension of Mixing Chamber	4 ft by 20 ft by 8.17 ft		
Dimension of Chlorine Contact/Tank	15 ft by 10 ft by 8.17 ft		
Volume/Tank	8,700 gallons		
Total Volume	17,400 gallons		
Detention Time at PHF	25 minutes		
Disinfection			
Туре	Sodium Hypochlorite Solution		
Number of Tanks	2		
Total Volume	2,300 gallons		
No. of Feed Pumps	2 (1 duty, 1 standby)		
Feed Pump Type	Iwaki-Welchem Metering Pumps		
Feed Pump Capacity	12 gph		

Effluent Chamber	
No. of Chambers	1
Volume	4,291 gallons
Reuse Sump	
No. of Tanks	1
Volume	6,461 gallons
No. of Pumps	2 (1 duty, 1 standby)
Ритр Туре	Vertical Turbine
Pump Capacity	955 gpm
Pump Horsepower	20 HP each
Secondary Effluent/Percolation Ponds	
No. of Ponds	4
Estimated Area of Pond #1	3.5 acres
Estimated Area of Pond #2	3.5 acres
Estimated Area of Pond #3	3.5 acres
Estimated Area of Pond #4	2.6 acres
Total Estimated Area of Ponds	13.1 acres
AADF Loading Rate	1.5 inches/day
Deep Injection Well (IW-1)	
Capacity	0.564 mgd
Well O.D.	4.50 inches
Well Steel Casing O.D.	7.625 inches
Estimated Depth	2500 feet below land surface
Deep Injection Well (IW-2)	
Capacity	9.71 mgd
Capacity During Operational Testing	2.88 mgd
Well I.D.	16.6 inches
Well Steel Casing I.D.	24 inches
Estimated Depth	3000 feet below land surface

Aerobic Digestion	
No. of Tanks	3
Volume of Tank #1	125,000 gallons
Volume of Tank #2	112,215 gallons
Volume of Tank for Decant	62,500 gallons
Total Volume of Aerobic Digestion	299,715 gallons
No. of Supernatant Return Pumps	2
Pump Type	Submersible
Pump Capacity	300 gpm
Pump Horsepower	5 HP each

5.0 Present Flows and Projected Flows

The Burnt Store WRF flows from January 2007 to September 2010 are presented in Table 3. The AADF from January 2007 through December 2009 is 0.257 mgd. Table 3 also shows the influent concentrations for BOD and TSS as well as effluent concentrations for BOD, TSS, and Total Nitrate.

Table 3 Burnt Store WRF Flows

			2007			
Month	Monthly Average Flow (mgd)	Influent CBOD (mg/L)	Influent TSS (mg/L)	Effluent CBOD (mg/L)	Effluent TSS (mg/L)	Effluent Total Nitrate
	0.239	196	215	1.2	0.8	1.32
January						
February	0.263	260	243	1.8	1.0	1.15
3.61	0.266	206	158	2.9	1.4	1.26
March April	0.255	177	237	1.9	1.1	0.42
May	0.224	132	152	1.7	0.7	0.67
June	0.216	123	143	1.8	1.1	0.54
July	0.179	154	144	1.9	0.7	0.98
August	0.180	103	121	1.8	0.7	2.69
September	0.209	92	111	2.1	0.8	0.52
October	0.234	121	95	1.5	0.7	0.67
November	0.246	140	115	1.8	0.7	4.14
December	0.246	150	117	1.8	0.6	2.25
Average	0.230	154	154	1.9	0.9	1.4

			2008			
Month	Monthly Average Flow (mgd)	Influent CBOD (mg/L)	Influent TSS (mg/L)	Effluent CBOD (mg/L)	Effluent TSS (mg/L)	Effluent Total Nitrate
	0.284	189	169	1.9	0.5	8.06
January						
February	0.307	206	169	1.8	0.6	3.13
	0.310	204	172	2.0	0.8	2.58
March						
April	0.292	153	141	1.4	0.5	1.00
	0.213	137	137	2.0	0.7	1.14
May	0.220	94	110	2.3	2.0	1.76
June	0.220	34	110	2.5		
July	0.253	77	134	1.3	0.7	7.33
August	0.291	61	82	1.2	0.6	3.07
September	0.302	62	88	1.3	0.6	1.04
October	0.261	98	143	1.3	0.5	6.94
November	0.261	148	234	1.6	1.0	10.52
December	0.251	165	218	2.0	0.4	2.70
December	0.270	133	150	1.7	0.7	4.1
Average	U.2/U	1,3,3	130	1,,	0.7	4.1

			2009			
Month	Monthly Average Flow (mgd)	Influent CBOD (mg/L)	Influent TSS (mg/L)	Effluent CBOD (mg/L)	Effluent TSS (mg/L)	Effluent Total Nitrate
January	0.281	181	235	2.0	0.4	5.80
February	0.310	228	232	2.0	0.8	1.25
March	0.326	241	240	2.1	1.1	1.79
April	0.284	232	277	1.7	0.6	0.99
May	0.236	144	189	1.4	0.6	5.17
June	0.223	118	152	2.0	0.6	9.52
July	0.221	110	149	2.0	0.8	6.13
August	0.281	71	101	2.0	0.6	5.99
September	0.260	79	111	2.0	0.5	4.66
October	0.247	99	135	2.0	0.9	1.73
November	0.275	161	202	2.0	0.5	7.10
December	0.313	154	172	2.0	0.9	3.74
Average	0.271	151	183	1.9	0.7	4.5

			2010			
Month	Monthly Average Flow (mgd)	Influent CBOD (mg/L)	Influent TSS (mg/L)	Effluent CBOD (mg/L)	Effluent TSS (mg/L)	Effluent Total Nitrate
January	0.372	199	236	2.2	2.1	2.16
February	0.416	230	225	2.0	1.6	5.73
March	0.434	237	259	2.9	2.7	6.41
April	0.359	203	228	2.5	1.2	4.78
May	0.254	159	157	2.1	1.9	7.23
June	0.212	138	173	2.1	1.4	2.63
July	0.262	125	128	2.2	0.7	3.92
August	0.304	75	114	2.0	0.6	2.35
September	0.281	N/A	N/A	N/A	N/A	N/A
October						
November						
December Average	0.322	171	190	2	2	4

The Monthly Average Flows for 2007 to September 2010 are shown graphically in Figure 1. The Influent BOD and TSS concentrations for 2007 to August 2010 are shown in Figure 2, and the effluent concentrations are shown in Figure 3. The Effluent Total Nitrate for 2007 to August 2010 is presented in Figure 4.

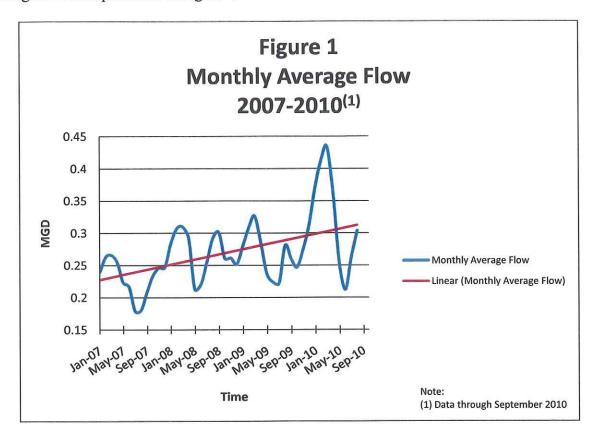


Figure 1 shows that the influent flows remained under the permitted capacity of 0.50 mgd for 2007 to September 2010. The peak flow was 0.434 mgd and occurred in March 2010. The average flow for the three year period is 0.27 mgd.

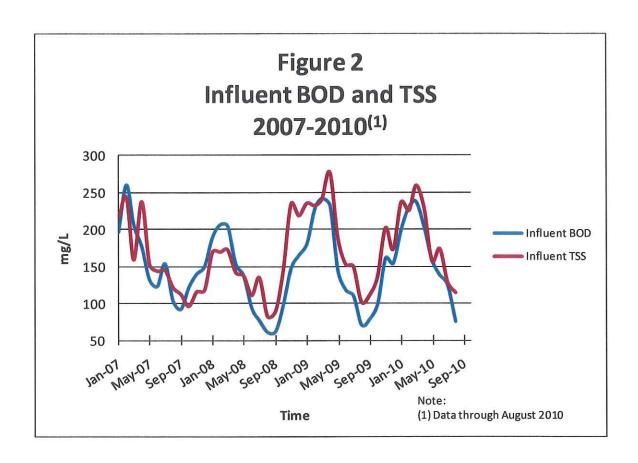


Figure 2 shows the influent concentrations of BOD and TSS into the facility. The average influent BOD concentration for 2007 to 2010 was approximately 146 mg/L; the average influent TSS concentration for 2007 to 2010 was approximately 162 mg/L. These averages are typical of domestic wastewater facilities in Southwest Florida.

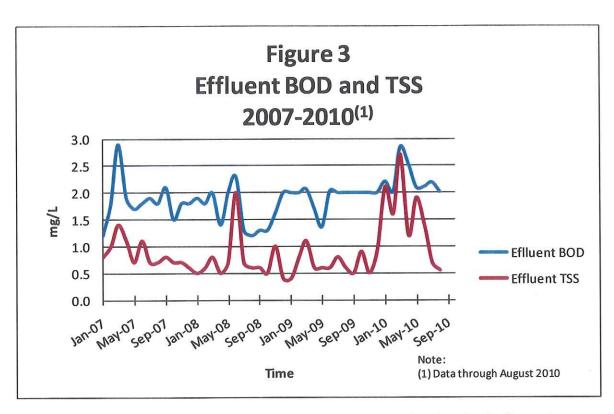


Figure 3 presents the effluent concentrations of BOD and TSS leaving the facility. The effluent concentrations must meet the FDEP permit conditions of 20 mg/L for BOD and 20 mg/L for TSS. The figure confirms that the effluent concentrations have been significantly below the permit condition of a maximum of 20 mg/L for both BOD and TSS.

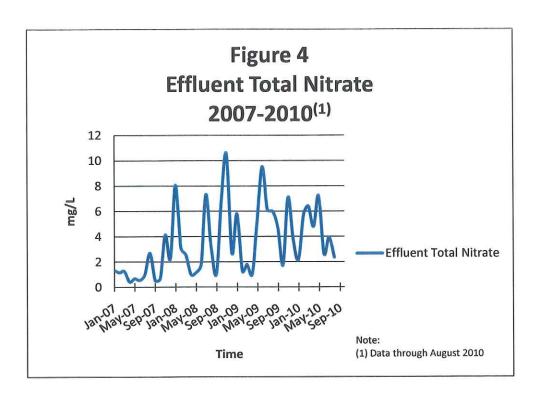


Figure 4 shows the effluent total nitrate for the facility from 2007 to 2010. The effluent concentrations must meet the FDEP permit requirements of 12 mg/L. As shown in the figure, the effluent concentrations of Total Nitrate have been below the FDEP maximum of 12 mg/L.

The Burnt Store WRF projected flows through 2030 are detailed below in Table 4. The flow projections under the column heading "Estimated ADF (mgd)" were taken from the June 10, 2009 Memorandum done by Hazen and Sawyer, P.C., which was subsequently included in the latest Capacity Analysis Report prepared by Stantec. For reference purposes only, AECOM adjusted the estimated flow projection to reflect the current economic climate. Flows are projected to increase in 2012 due to flows from Burnt Store Colony. Charlotte County estimates only a 1½% growth rate between 2012 and 2016. It was assumed that flows beyond 2016 would increase based on the originally estimated 10% growth rate. The adjusted estimated flow projections are provided in the last column of Table 4.

Table 4 Burnt Store WRF Projected Flows

Year	Estimated ADF (mgd)	Adjusted Estimated ADF (mgd)
2009	0.30	0.30
2010	0.33	0.33
2011	0.36	0.36
2012	0.40	0.40
2013	0.44	0.41
2014	0.48	0.41
2015	0.53	0.42
2016	0.58	0.42
2017	0.64	0.47
2018	0.70	0.51
2019	0.77	0.57
2020	0.85	0.62
2021	0.94	0.68
2022	1.03	0.75
2023	1.13	0.83
2024	1.25	0.91
2025	1.37	1.00
2026	1.51	1.10
2027	1.66	1.21
2028	1.82	1.33
2029	2.01	1.47
2030	2.21	1.61

These projections show that an expansion or re-rate will be needed at the Burnt Store WRF. The FDEP regulations (Chapter 62-600) require activities according to the following schedule:

- If the capacity analysis report (CAR) as prepared in accordance with Chapter 62-600.405, shows the permitted capacity will be equaled or exceeded within the next five years, that planning and preliminary design of the necessary expansion should have been initiated.
- If the CAR as prepared in accordance with Chapter 62-600.405, shows permitted capacity will be equaled or exceeded within the next four years, plans and specifications for the necessary expansion should be in the process of being prepared.
- If the CAR as prepared in accordance with Chapter 62-600.405, shows permitted capacity will be equaled or exceeded within the next three years, the permittee shall submit a complete construction permit application to the Department within 30 days of submittal of the initial CAR or the update of the CAR.
- If the CAR as prepared in accordance with Chapter 62-600.405, shows permitted capacity will be equaled or exceeded within the next six months, the permittee shall submit to the Department an application for an operation permit for the expanded facility.

The treatment efficiencies for BOD and TSS from January 2007 until August 2010 are detailed below in Table 5. The influent concentrations are typical for domestic wastewater facilities. The effluent loadings are within the design range, and the removal efficiencies are 98.8% for BOD and 99.5% for TSS.

Table 5-Removal Efficiency

Parameter	Influent Concentration	Effluent Concentration	Removal Efficiency
BOD	146 mg/L	1.8 mg/L	98.8%
TSS	162 mg/L	0.8 mg/L	99.5%

6.0 Improvements Needed for Re-rate

AECOM evaluated the existing structures at the Burnt Store WRF on September 22, 2010. AECOM proposes the following improvements needed to re-rate the permitted capacity to 0.75 mgd in this section and AECOM proposes that the WRF use conventional aeration instead of extended aeration to help increase capacity. Each process was evaluated based on common practices of wastewater engineering design, Wastewater Engineering Treatment and Reuse, 4th Edition (Metcalf & Eddy), Recommended Standards for Wastewater Facilities, 2004 (Ten State Standards), and FDEP Rules. In addition, The Burnt Store WRF must meet Class III reliability in accordance with 62-600 of the Florida Administrative Code (F.A.C.). Class III reliability requirements are summarized in Table 6.

Table 6 - EPA Class III Reliability Requirements

Components	Requirements
Mechanically-Cleaned Bar Screens	Provide manual back-up bar screen
Backup Pumps	Required – Sufficient capacity of remaining pumps to handle peak flow with one (1) pump out of service.
Aeration Basin	A single basin is permissible.
Blowers for Aeration	At least two (2) units available for service.
Air Diffusers	Design such that the largest section of diffusers can be isolated without measurably impairing oxygen transfer ability of the system
Final Clarifier	At least two (2) sedimentation basins are required.
Filters	No backup required.
Chlorine Contact Basin	No backup required.
Backup Power Source	Sufficient to operate all vital components during peak wastewater flow conditions

The peaking factors used for this evaluation were calculated based on flow data provided by the County to AECOM. The peaking factors are presented in Table 7. Based on this evaluation, the bottlenecks of the WRF are determined. The bottlenecks are detailed below as well as the corresponding capacity.

Table 7-Flow Peaking Factors

Basis	Peaking Factor
Max Month:AADF	1.33
Max Day:AADF	2.13
Peak Hour:AADF	2.83

6.1 Screening/Headworks

Currently the Burnt Store WRF uses a manual bar rack to remove large debris from the raw influent wastewater. The plant operators manually rake the collected debris periodically throughout the day. As influent flows increase the amount of debris is expected to increase. A mechanical bar screen is recommended to provide continuous screenings removal. The screen will clean itself automatically and deposit the screenings into chute that will transport the screenings to a dumpster located at grade. If the screen malfunctions or when the water level reaches the over flow level, the wastewater will be routed through the emergency bypass containing a manual bar rack in accordance with Class III reliability. The mechanical screen will operate normally using either a timer or water level to control the cleaning cycle. However, should a high water level be detected upstream of the screen, the timer will be bypassed and the screen cleaning cycle will start.

The mechanical screen and manual bypass screen could be provided within a steel prefabricated enclosure. The enclosure will also help contain odors at the screenings area. The enclosure would be installed on an elevated platform or on steel support pedestals with aluminum stairs and platform for access. The mechanical screen, manual screen and screenings enclosure will be sized based on peak hour flow (2.83 x AADF, or 2.12 mgd, based on proposed potential rerated capacity of 0.75 AADF). Recommended opening sizes for the mechanical and manual bar rack are 6 mm and 1-inch respectively.

6.2 Flow Equalization Tank

Plant data was used to evaluate the potential design plant capacity that could be equalized to maximum daily flow conditions within the existing 100,000 gallon equalization tank. The capacity of the equalization tank was determined using an inflow cumulative volume diagram methodology in accordance with Metcalf & Eddy. Diurnal flow information for August 11, 2010 was used to determine the required volume at current AADF. Based on influent flow data for August 8, 2010, with an influent flow of 0.462 mgd, 40,000 gallons of flow equalization volume was required. Assuming a flow factor (current ADF/design AADF) to adjust to potential design flows, the existing structure can provide adequate volume to provide complete flow equalization to maximum daily flow conditions at the

Burnt Store WRF up to a potential capacity of 0.542 mgd AADF. Alternatively, the flow equalization tank can be used in a peak shaving mode to store flows in excess of a flow slightly higher than the maximum daily flow. Based on the concept of peak shaving as proposed, the existing 100,000 gallon storage tank can provide enough storage capacity to attenuate influent flows up to approximately 0.93 mgd AADF. Therefore based on the design intent of the flow equalization tank, no additional volume will be required.

Under either complete flow equalization or peak shaving, the existing flow equalization volume will stabilize the influent flow surges caused by on/off pump operation in the collection system which are often significantly higher than the observed peak hour flows. Influent flow surges with high instantaneous flows are a typical occurrence at smaller facilities, like the Burnt Store WRF. This will prevent surges to downstream processes.

Recommended Standards for Wastewater Facilities, often referred to as Ten States Standards, recommends providing aeration or mechanical equipment to maintain adequate mixing. At a minimum, Ten States Standards recommends providing sufficient aeration capacity to supply 1.25 cfm/1000 gal of storage capacity. The existing blower has a capacity of 307 cfm. With an equalization volume of 100,000 gallons, the existing blower provides 3.07 cfm/1000 gal of storage volume. Therefore, the existing blower provides sufficient mixing for the existing flow equalization tank.

6.3 Flow Equalization Pumps

From the flow equalization tank raw wastewater is pumped to the activated sludge process for BOD and nitrogen removal. There are two existing pumps, each rated at 400 gpm (0.57 mgd each). Therefore the total pump capacity of the flow equalization pumps is 800 gpm (1.15 mgd). As described above, the flow equalization tank is intended to shave instantaneous influent peaks. The flow equalization tank will fill during high flow periods. Once the equalization tank reaches its storage capacity, it overflows the bypass weir and continues to flow by gravity to the downstream processes. Therefore, the basis of design for the equalization pumps will be MDF.

Flows greater than MDF will collect in the equalization tank until it reaches capacity at which time excess flows would gravity flow over the bypass weir to the downstream processes. Class III reliability requires a standby pump such that with the largest pumping unit out of service, the remaining pumps have sufficient capacity to pump the peak design flow. However, if a pump is removed from service for maintenance, the flows can overflow the bypass weir and flow downstream from the equalization tank by gravity. Therefore, a stand-by pump is not required. Based on a maximum daily flow factor of 2.13 (See Table 7), the capacity of the existing pumps is 0.54 mgd AADF.

Typically pumping systems with greater than three or four pumps do not see an appreciable increase in flow capacity with the addition of pumps. Therefore it is recommended to limit the number of pumps in the system to three or four active pumps. Therefore, based on adding a third pump of equal capacity to the existing equalization pumps (400 gpm) the potential rerated capacity of the flow equalization pumps is expected to be 1,200 gpm or 0.81 mgd. The addition of a fourth pump may provide additional capacity however the increase is not expected to be directly proportional to the number of pumps. Further hydraulic analysis would be required to determine if additional capacity could be achieved

by adding a fourth pump. Due to potential high pipe velocities in the existing suction and discharge piping at the flow equalization tank and pumps at the proposed higher pumping capacity and potential design flows, the suction and discharge piping will be upsized.

6.4 Grit Removal

Currently the Burnt Store WRF does not provide grit removal. Generally, the objective of grit removal is to remove abrasive inorganics (sand) or low biodegradable organics (coffee grounds or egg shells) materials to reduce the wear on pumping equipment due to the abrasiveness of grit. If grit is not treated, it tends to accumulate in process tanks because it is difficult to keep the material in suspension. To reduce grit buildup in the downstream process, it is recommended that a grit cyclone be provided. Wastewater from the flow equalization tank could be processed through a grit cyclone and grit dewatering equipment to protect downstream equipment and reduce build-up in the process tanks which would decrease treatment volume overtime.

A grit pump would withdraw flows from flow equalization tank and pump to a grit cyclone. The energy generated by the feed stream is converted to centrifugal force and the heavier solids are thrown outward and spiral downward to discharge as a concentrated underflow at the apex. Meanwhile, the liquid phase and lighter solids move inward toward the vertical axis and are extracted through the vortex finder, exits the top of the cyclone where it discharges the processed flow. The processed flow could then be returned to the flow equalization tank for further treatment. The concentrated grit slurry discharges from the underflow at the bottom of the cyclone. The grit slurry would then be further dewatered. This could be accomplished using a filter dumpster. Excess liquid would be captured and returned to the plant. The dewatered grit would collect in a dumpster and disposed of offsite at a landfill.

6.5 Process Aeration Tanks

There are two existing circular steel tanks at the Burnt Store WRF; one to provide aeration capacity in the activated sludge process and the second for aerobic digestion. Currently biological treatment is accomplished using the extended aeration treatment method. To maximize the potential rerated capacity, the basis of design for the following rerate evaluation is to convert to a conventional activated sludge process. Within the process basin, there are two parallel aerated process trains, each with a volume of 150,000 gallons and air diffusers located in multiple sections. The total existing aeration volume is 300,000 gallons. The capacity of the existing process tank based on the influent characteristics of the influent wastewater and permitted effluent requirements is 0.72 mgd.

The influent wastewater characteristics used for the activated sludge treatment capacity are summarized in Table 8. The effluent design criteria are summarized in Table 9.

Table 8-Influent Characteristics

Parameter	Value
Influent BOD	237 mg/L
Influent TSS	259 mg/L
Influent TKN	50 mg/L

Table 9-Effluent Quality

Parameter	Value
Effluent BOD	20 mg/L
Effluent TSS ⁽¹⁾	20 mg/L
Effluent TN (goal)	12 mg/L

Note: (1) Effluent TSS from Activated Sludge Process. Additional Solids removal for unrestricted public access reuse effluent provided at downstream filters.

The aerobic digester tank is equal in size to the process basin also with two parallel aerated sludge processing trains. At the downstream side of the digester trains is a third compartment within the steel tank where the sludge is allowed to settle. Supernatant is removed to increase the solids content of the waste sludge prior to the sludge being transported to Eastport WRF.

The basis of design for the evaluation of the potential capacity of the biological treatment process is maximum monthly flow conditions. Two biological treatment configurations were evaluated, a conventional activated sludge (CAS) process and Modified Ludzack-Ettinger (MLE) process. The CAS process would operate similar to the existing process and would be based on controlling DO such that nitrification and denitrification would occur in the same tank. This option would be capable of meeting the nitrogen requirements for disposal via the percolation ponds under normal operating conditions but may not reliably meet the nitrogen requirement during seasoned high flows or loadings. However there are two alternate forms of disposal available that could be used during the periods where nitrogen limits for the percolation ponds are not met. The second option would separate the nitrification/denitrification process by creating an anoxic zone at the head of the process and returning RAS and nitrified mixed liquor back to the anoxic zone for denitrification using internal recycle pumps. To increase the potential capacity of the activated sludge process. approximately 237,500 gallons of the total aerobic digester volume could be converted to additional process treatment volume. The would allow the Burnt Store WRF to reliably meet the effluent nitrogen requirement of the percolation ponds but will require significant modifications to the process basins including but not limited to hydraulic modifications to redirect flows, the addition of internal recycle pumps and submersible mixers in the anoxic zone to prevent solids from settling.

The potential capacity of both the CAS process and MLE process is limited by the surface overflow rate of the clarifiers (See Section 6.7). The increase in process treatment volume and associated modifications for both alternatives could provide a potential rerated capacity of 0.75 mgd AADF. The design criteria for the CAS process are summarized in Table 10.

The design criteria for the MLE process are summarized in Table 11.

Table 10-CAS Process Basis of Design

Parameter	Value
Potential Capacity, AADF ⁽¹⁾	0.75 mgd
Design Flow @ MMF	1.0 mgd
Total Volume	0.30 MG
MLSS	3500 mg/L
F:M Ratio	0.286
Yield	0.95 lbs TSS /lb BOD
SRT	5 days

Note: (1) CAS process capacity limited by surface overflow rate at clarifiers.

Table 11-MLE Process Basis of Design

Parameter	Value
Potential Capacity, AADF ⁽¹⁾	0.75 mgd
Design Flow @ MMF	1.0 mgd
Aerobic Volume	0.30 MG
Anoxic Volume	0.237 MG
Total Volume	0.537 MG
MLSS	3,400 mg/L
F:M Ratio	0.171
Yield	0.90 lbs TSS /lb BOD
Aerobic SRT	4.7 days
SRT	8.83 days

Note: (1) MLE process capacity limited by surface overflow rate at clarifiers.

6.6 Process Blowers

There are currently three centrifugal blowers (two active and one standby) rated at 1,360 scfm each for a total firm blower capacity of 2,720 scfm. Approximately 170 scfm is required for mixing the sludge holding tank based on proposed modifications. Therefore, 2,550 scfm is available for the aeration at the activated sludge process. Aeration demand varies based on influent nutrient loadings to the plant. Table 12 summarizes the basis of design for the aeration system.

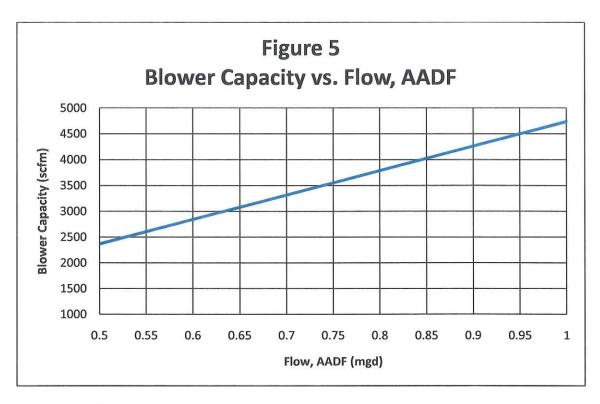
Table 12-Aeration System Basis of Design

		Design Criteria	
Parameter	AADF	MMF	MDF
Influent BOD	237	237	237
Effluent BOD (goal)	7	7	7
BOD O ₂ Required			
(lb O ₂ /lb CBOD removed)	1.10	1.10	1.10
Influent TKN	50	50	50
Effluent TKN (goal)	2	2	2
Effluent TN (goal)	12	12	12
TKN O ₂ Required			
(lb O2/lb TKN removed)	4.60	4.60	4.60
O ₂ Denit Credit			1
(lb O ₂ /lb NO ₃ -N reduced)	2.86	2.86	2.86
Temperature	20°C	30°C	30°C
DO (mg/L)	2.0	2.0	1.0
AOR/SOR	0.53	0.41	0.50
FOTE (%)	5.6%	4.3%	5.2%

The basis of design for the aeration system is MMF conditions at a DO concentration of 2.0 mg/L or MDF conditions at a DO concentration of 1.0 mg/L, whichever is greater. Based on using coarse bubble diffused air (design alpha value 0.7) and a 15 ft side water depth (14 ft submergence) at a design temperature of 30°C, it was determined that MDF at a DO of 1.0 mg/L has a higher aeration requirement and therefore will dictate the aeration design and blower capacity required at any potential rerated plant capacity. Based on a max-day flow factor of 2.13 (Table 7) the blower capacity was determined based on various AADF conditions. The total blower capacity versus AADF is shown graphically in Figure 5.

Based on an available 2,550 scfm of available aeration capacity from the existing blowers and Figure 5, it was determined there is the potential to provide sufficient aeration capacity for up to approximately 0.54 mgd AADF.

If one new blower of equal capacity was provided, the firm blower capacity would be 4,080 scfm. Based on providing 170 scfm for mixing the sludge holding tank, 3,910 scfm is available for the aeration at the activated sludge process. From Figure 5, it was determined that adding a blower would increase the potential aeration capacity to approximately 0.83 mgd AADF.



6.7 Clarifiers

There are two design references that are commonly used as the basis of design for secondary clarifiers in municipal wastewater applications; (1) Metcalf & Eddy and (2) Ten States Standards. Typical design criteria for secondary clarifiers is based on solids and surface (or hydraulic) loadings. Design values vary based on the type and level of secondary treatment provided. Typical design values for clarifier design of a conventional aeration process are summarized in Table 13.

Table 13- Typical Design Values for Secondary Clarification

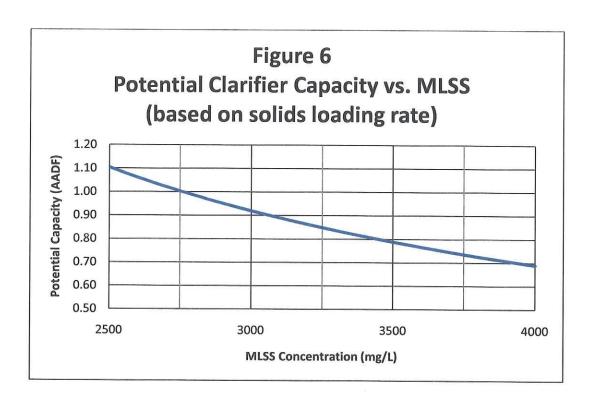
	Recommen	nded Values
Parameter	Metcalf & Eddy	Ten States Standards
Solids Loading (ppd/sf)	24-36 (AADF) 43 (peak flow)	50 (max, MDF)
Surface Loading (gpd/sf, AADF)	400-700	
Surface Loading (gpd/sf, PHF)	1,000-1,600	1,200

Based on Ten States Standards recommended surface loading rate (1,200 gpd/ft² at PHF), the potential rerated capacity of the existing clarifiers is 0.75 mgd AADF. Based on Metcalf and Eddy's range of recommended surface loading rates (400-700 gpd/ft² at AADF and 1,000-1,600 gpd/ft² at PHF) the maximum potential rerated capacity of the existing clarifiers is approximately 1.0 mgd AADF. However, designing around this high of a surface overflow rate is not typical. It is recommended to use Ten States Standards recommendation on surface loading rates at peak flows as the basis of design at the Burnt Store WRF to reduce the potential for solids carryover. Therefore, the recommended potential rerated capacity of the clarifiers based on surface loading is 0.75 mgd AADF.

The potential treatment capacity of the existing clarifiers based on solids loading rates varies with the MLSS concentration of the activated sludge process. Table 9 summarizes the recommended solids loading rates from both Ten States Standards and Metcalf & Eddy. Although Ten States Standards basis for their recommended solids loading is maximum daily flows, at peak hour flows the solids loading would be significantly greater than Metcalf & Eddy's recommended 43 ppd/ft². High solids loading could result in excess solids carry over and not recommended. Therefore, for the following clarifier analysis a basis of 50 ppd/ft² at peak flows was used in lieu of the maximum daily flow condition as stated in Ten States Standards. Figure 6 below shows the potential rerate capacity of the clarifiers based on a maximum 50 ppd/ft² solids loading rate at peak flows at various MLSS concentrations.

The proposed activated sludge process design is based on a design MLSS concentration of approximately 3,500 mg/L. The corresponding potential rerated capacity of the existing clarifiers based on an average solids loading at 3,500 mg/L MLSS is approximately 0.79 mgd.

Based on the combination of surface and solids loadings of the clarifiers, surface loading to the clarifiers appears to be the limiting factor. Therefore the potential rerated capacity of the clarifiers is 0.75 mgd AADF.



6.8 Sludge Pumps

There are two existing, 434 gpm (0.62 mgd), sludge pumps that deliver settled solids from the clarifier to either the sludge storage tanks (referred to as waste activated sludge or WAS) or returns solids to the activated sludge process (referred to as return activated sludge or RAS). Based on the proposed activated sludge process design, approximately 30,000 gpd (20 gpm based on continuous wasting at 0.7 percent solids) of WAS will be wasted from the process each day for every million gallons per day of influent raw wastewater treated. Typical RAS rates range from 50% of the AADF to 150% AADF. Assuming a typical design RAS rate of 100% AADF, the maximum available pump capacity remaining for the RAS process is 848 gpm (1.22 mgd). Currently, the pump station is configured such that each sludge pump serves one of the existing clarifiers. At the current plant capacity if one pump is removed from service for maintenance, the second pump can pump the RAS design flows. Therefore the potential rerated capacity of the sludge pumps is limited to 0.62 mgd based on Class III reliability which requires sufficient pump capacity to be provided such that with the largest pump out of service, the remaining pumps have sufficient capacity to pump peak design flows. Therefore, it is recommended that a third RAS pump be provided to serve as a common standby. This would provide a potential rerated capacity of the sludge pumps at 100% AADF design RAS flow is 1.22 mgd.

6.9 Sludge Holding

To provide additional activated sludge process volume, approximately 237,500 gallons of existing sludge storage volume will be used. Therefore 62,500 gallons of sludge storage will remain. Sludge storage is provided to store WAS prior to transport and further treatment

offsite. Sludge storage at the Burnt Store WRF is not intended to treat or stabilize the WAS prior to transport and will not limit the potential treatment capacity of the facility.

6.10 Filtration

Per the disk filter manufacturer's design recommendation, the peak loading rate of each disk for filtration is 500,000 gpd. There are currently four disks used for filtration. Based on a 2.83 peaking factor (Table 7), the capacity of the existing four disk filter unit is 0.707 mgd AADF. The existing filter enclosure has available space for the addition of two disks to be provided at the Burnt Store WRF. With a total of five disks the total peak flow capacity of provided at the Burnt Store WRF. With a total of five disks the total peak flow capacity of the five disk filter unit based on a 2.83 peaking factor (Table 7), the potential leasted capacity of the five disk filter unit based on manufacturer's recommended peak loading is 0.88 mgd AADF. Adding the sixth disk filter would increase the total peak potential rerated capacity of the six disk filter unit based on manufacturer's recommended peak loading is 1.06 mgd AADF. Since the existing disk filter has space available to install two additional filter disks, the County could consider installing two filter disks even if one disk provides sufficient capacity to meet the rerated flows. Addition of the sixth filter disk would have minimal cost and would decrease solids loading to the filters increasing removal efficiency and providing additional redundancy to the filtration process.

6.11 Chlorine Contact

FDEP regulation 62-600.440 prescribes values for CT (where C is residual disinfectant concentration (mg/L) and T is contact time (minutes)) for specific treatment and disinfection conditions to achieve desired levels of pathogen inactivation under various conditions. The function of the chlorine contact tanks is to provide a serpentine flow path to allow contact time to achieve appropriate "CT" values for the inactivation of pathogens that may still be present in the treated effluent. A "CT" of at least 25 will be required for high-level disinfection at peak design flows. In addition to meeting the "CT" value, FDEP requires minimum contact duration of 15 minutes at peak design flows. The existing chlorine contact chambers are 8,700 gallons each. Based on 15-minute contact time at peak flow and a peak flow factor of 2.83 (Table 7), the existing capacity of the two chlorine contact chambers is 0.59 mgd AADF.

The addition of a third equally sized chlorine contact chamber would provide a total 21,400 gallons contact volume. Based on a peak flow factor of 2.83 (Table 7), with construction of a third 8,700 gallon contact chamber, the potential rerated capacity of the chlorine contact chambers would be 0.885 mgd AADF.

6.12 Sodium Hypochlorite Storage and Feed Facilities

There are currently two 12 gph sodium hypochlorite feed pumps, one active and one standby. Feed pumps should be sized for PHF conditions. Based on a peak hourly flow factor of 2.83 (Table 7), at peak flows and a maximum design dose of 12 mg/L, the required volume of a 12.5% sodium hypochlorite solution per 1.0 mgd AADF of influent flow is 4.2 gph. Therefore the existing pumps exceed the required sodium hypochlorite feed rates at the desired flows.

The two double walled self-contained sodium hypochlorite storage tanks provide a total 2,300 gallons of storage. Recommended storage varies based on accessibility and delivery size. Typical design storage capacity may range from 7 to 30 days. Sodium hypochlorite begins to degrade after approximately 30 days. Therefore, Ten States Standards does not recommend exceeding 30 days of storage for sodium hypochlorite service. The basis of design for sodium hypochlorite storage is average flow conditions. For domestic wastewater facilities with tertiary filtration, like the Burnt Store WRF, Ten States Standards recommends sizing chlorination equipment based on an average dosage rate of 6.0 mg/L. In accordance with Ten States Standards, at AADF, the required volume of a 12.5% sodium hypochlorite solution for 1.0 mgd AADF of influent flow is 2.1 gph. Therefore, the existing storage available for sodium hypochlorite exceeds the maximum recommended 30 days. No additional storage will be required at the desired rerated flows. It is recommended that only 30 days worth of sodium hypochlorite be kept onsite, if feasible. If delivery times do not allow for maintaining less than 30 days of sodium hypochlorite onsite due to either delivery size or availability, the feed rate may need to be adjusted to account for any degradation that may occur.

6.13 Reject Storage

For facilities that provide unrestricted public access reuse effluent, additional off-line systems for reject water (substandard effluent) storage must be provided. Chapter 62-610, F.A.C. requires facilities to provide a minimum reject storage volume equal to one day flow at the AADF design flow of the treatment facility or the average daily permitted flow of the reuse system, whichever is less. However, the Burnt Store WRF has two alternative disposal methods to the unrestricted public access effluent disposal, percolation ponds and deep well injection, that can be used to dispose of substandard effluent. Therefore, reject storage is not required.

6.14 Reclaimed Water Pumps

There are two vertical turbine reuse pumps, each rated for 955 gpm (1.38 mgd). The proposed rerate of the Burnt Store WRF does not include increasing the permitted capacity of the unrestricted reuse service area. Therefore no modifications of the reclaimed water pumping systems are anticipated for the proposed rerate.

6.15 Summary of Unit Process Capacity Analysis

Table 8 summarizes the potential rerated capacity of each major unit process at the Burnt Store WRF. Additional modifications maybe required that were not addressed herein including but not limited to hydraulic constraints, standby power capacity requirements, etc.

Table 14- Unit Process Capacity Analysis Summary (MGD, AADF) - CAS

Unit Process	Screening	Grit Removal	EQ	CAS	Aeration Blowers	Clarifiers	Sludge	Filters	Chlorine Contact	NaOCI Storage & Feed	Potential Capacity (mgd, AADF)
Existing Capacity	0.5	-	0.54	0.72	0.54	0.75	0.62	0.71	0.59	>1.0	0.54
Add EQ Pump			0.81								0.54
Add Blower					0.83						0.59
Add Chlorine Contact Chamber									0.89		0.62
Add Sludge Pump							1.22				0.71
Add Filter Disk								0.88			0.72
Digester/Aeration Tank (CAS) Modifications				0.75					A DATA OF THE STATE OF THE STAT		0.75
Add Mechanical Screen with Manual Bypass (Optional)	0.75										0.75
Add Grit Removal (Optional)		0.75	Additional of the state of the		A A A A A A A A A A A A A A A A A A A						0.75

⁽¹⁾ The following unit processes that do not impact the proposed rerated capacity are not listed in the above capacity analysis summary: EQ Tank, Sludge Holding, and Reject Storage.

⁽²⁾ An increase in capacity of the permitted public access reclaimed water system is not proposed as part of the proposed rerate and is not listed in the above capacity analysis summary.

Table 15- Unit Process Capacity Analysis Summary (MGD, AADF) - MLE

Unit Process	Screening	Grit	EQ	MLE	Aeration Blowers	Clarifiers	Sludge	Filters	Chlorine Contact	NaOCI Storage & Feed	Potential Capacity (mgd, AADF)
Existing Capacity	0.5	0	0.54	0	0.54	0.75	0.62	0.71	0.59	×1.0	0.54
Digester/Aeration Tank (MLE) Modifications				0.75							0.54
Add EQ Pump			0.81								0.54
Add Blower	Marinin				0.83		The state of the s				0.59
Add Chlorine Contact Chamber									0.89		0.62
Add Sludge Pump							1.22				0.71
Add Filter Disk	MATERIAL							0.88			0.75
Add Mechanical Screen with Manual Bypass (Optional)	0.75									a. Constitution of the con	0.75
Add Grit Removal (Optional)		0.75									0.75

(1) The following unit processes that do not impact the proposed rerated capacity are not listed in the above capacity analysis summary: EQ Tank, Sludge Holding, and Reject Storage.

⁽²⁾ An increase in capacity of the permitted public access reclaimed water system is not proposed as part of the proposed rerate and is not listed in the above capacity analysis summary.

6.16 Potential Rerate Capacity

The limiting unit process for the Burnt Store WRF is the activated sludge process (biological treatment and clarification). The potential rerated capacity of the biological treatment process is limited by the surface overflow rate of the clarifiers. In order to achieve a greater treatment capacity, a plant expansion would be required. Therefore, a maximum rerated capacity of 0.75 mgd AADF is recommended.

The proposed rerated capacity of 0.75 mgd can be achieved using either the CAS process or MLE process. The MLE process would also provide the Burnt Store WRF with the ability to reliably meet the effluent nitrogen requirement for disposal via the percolation ponds year-round. However, the MLE process would require significant modifications in the process configuration of the existing aeration tank and aerobic digester tank. It would also require the installation of IR pumps and submersible mixers. The CAS process would not provide reliable nitrogen removal year-round to continuously meet the effluent nitrogen requirements for disposal via the percolations ponds. However, the Burnt Store WRF has two alternate disposal methods available that could be used during periods where the effluent nitrogen exceeds permitted levels for disposal via the percolation ponds. Additionally, the CAS process would provide the same 0.75 mgd AADF of treatment capacity with fewer modifications required to the existing aeration tank and aerobic digester tank. The CAS process would not require IR pumps or submersible mixers. Therefore, it is recommended that the potential 0.75 mgd AADF rerate be accomplished using the CAS process.

The potential rerate can be completed in several phases. See Tables 14 and 15 for potential sequencing of improvements and corresponding potential rerate capacity. Improvements can be made to each unit process describe previously individually or in several combinations to achieve interim rerated capacities. For example, Table 14 shows that installing a new flow equalization pump increases the potential rerate capacity from 0.54 mgd AADF to 0.59 mgd AADF. Similarly, adding a flow equalization pump, chlorine contact chamber, and RAS pump increases the potential rerate capacity from 0.54 mgd AADF to 0.71 mgd AADF.

6.17 Additional Recommended Improvements

AECOM performed a site evaluation of the existing structures at the Burnt Store WRF on September 22, 2010. The following potential process improvements and/or deficiencies were noted and should be considered for the Burnt Store WRF as funding permits.

- Consider construction of a new headworks structure that would provide influent screening and a separate grit removal process in lieu of combining grit removal with flow equalization process.
- Rehab existing splitter box at flow equalization tanks. Repair leaks.
- Replace shear gates with flange-mounted slide gates at aeration basin. Provide a second flange-mounted slide gate on the other end of pipes connecting process basins.
- Provide drains at aeration tanks and drain to plant lift station for maintenance
- Provide access for maintenance at the aeration basin and add minimum 2 hoists.
- Replace stairway and recoat sludge holding/converted process tank.
- Modify telescoping valve for sludge decant.

• Install and make operational the disk filter unit from Rotonda WRF to provide process redundancy.

• Repair cracks in concrete of chlorine contact chambers.

• Investigate existing hydraulic constraint for gravity flow from secondary effluent sump to the deep well pump station wet well, and provide a way to send all off-spec water to a deep well.

Revise reuse pump operating control scheme from level control to pressurized system. Provide variable frequency drives for reuse pumps and provide controls

and instrumentation necessary for conversion.

Install reuse flowmeter.

• Provide flow proportioned composite sampler for influent sampling. Relocate composite sampler to grade if possible.

• Inspect side slopes at percolation ponds and repair as needed.

7.0 Preliminary Opinion of Probable Construction Cost

The following Preliminary Opinion of Probable Construction Cost (OPCC) is prepared based on the recommended improvements stated in this Technical Memorandum. Any Opinion of the Probable Construction Cost prepared by AECOM represents its judgment as a design professional and is supplied for the general guidance of the County. Since AECOM has no control over the cost of labor and material, or over competitive bidding or market conditions, AECOM does not guarantee the accuracy of such opinions as compared to contractor bids or actual cost of the project.

The estimated probable cost is expressed in current December 2010 dollars, and a September 2010 ENR CCI value of 5762.9 for Atlanta, GA. These costs may be updated using the Engineering News Record (ENR) Construction Cost Index (CCI). The OPCC does not include legal fees, site specific conditions, solids handling services, operation and maintenance, power, spare parts, permitting, engineering, bidding, construction administration, or facility staff costs.

AECOM has developed an Association for the Advancement of Cost Engineering (AACE) Class 4 OPCC for the potential rerate of the Burnt Store WRF. The OPCC provided herein is considered to be at a Class 4 (Study or Feasibility) level (-15 percent to + 30 percent), as defined by the Estimate Classification Systems from the American Association of the Advancement of Cost Engineering International (AACEI). Costs listed are approximate for recent (December 2010) materials and should be adjusted for forecasting future project cost.

Costs of equipment and installation were based on prices obtained from equipment manufacturers, their representatives or data collected during similar past projects. These costs are subject to change due to variable factors such as the economy, energy costs and raw material availability. Actual equipment selection is also subject to change during final project design. Operating warranties from equipment manufacturers have a non-assignable cost benefit. These were not included in the OPCC.

Similar to equipment costs, raw material and labor costs are also subject to changes in the economy and energy costs.

Tables 16 and 17 summarize the preliminary OPCC per unit process for both the CAS process and MLE process alternatives. If the project is phased to implement portions of the rerate improvements separately, the total of the costs for each phase will be higher than the OPCC provided. Each alternative is based on the following improvements:

- New packaged mechanical screen and bypass bar rack, including support structure, aluminum stairs and access platform. (Optional)
- One new flow equalization pump rated at 400 gpm.
- New grit pumps, grit cyclone, and dewatering dumpster. (Optional)
- One new sludge pump rated at 434 gpm.

- One new filter disk.
- New 8,700 gallon chlorine contact chamber similar to existing.
- Miscellaneous Yard Piping
- Electrical/Instrumentation and Controls for new equipment

Table 16- Preliminary Opinion of Probable Construction Cost – CAS

Unit Process	Potential Capacity	Cost	Cumulative Cost	Cost/gpd
Existing Capacity	0.54			
Add EQ Pump	0.54	\$69,000	\$69,000	
Add Blower	0.59	\$136,000	\$205,000	\$4.10
Add Chlorine Contact Chamber	0.62	\$101,000	\$306,000	\$3.83
Add RAS Pump	0.71	\$71,000	\$377,000	\$2.22
Add Filter Disk	0.72	\$59,000	\$436,000	\$2.42
Digester/Aeration Tank (CAS) Modifications	0.75	\$115,000	\$551,000	\$2.62
Add Mechanical Screen with Manual Bypass (Optional)	0.75	\$779,000	\$1,330,000	\$6.33
Add Grit Removal (Optional)	0.75	\$216,000	\$1,546,000	\$7.36

In addition to the improvements for the CAS process, the MLE process improvements include:

- Converting a portion of the aerobic digesters to anoxic process volume.
- Internal recycle pumps and piping.
- Mixers
- Mixed Liquor Yard Piping

Table 17- Preliminary Opinion of Probable Construction Cost - MLE

Unit Process	Potential Capacity	Cost	Cumulative Cost	Cost/gpd
Existing Capacity	0.54			
Digester/Aeration Tank (MLE) Modifications	0.54	\$346,000	\$346,000	
Add EQ Pump	0.54	\$69,000	\$415,000	
Add Blower	0.59	\$136,000	\$551,000	\$11.02
Add Chlorine Contact Chamber	0.62	\$101,000	\$652,000	\$8.15
Add RAS Pump	0.71	\$71,000	\$723,000	\$4.25
Add Filter Disk	0.75	\$59,000	\$782,000	\$3.72
Add Mechanical Screen with Manual Bypass (Optional)	0.75	\$779,000	\$1,561,000	\$7.43
Add Grit Removal (Optional)	0.75	\$216,000	\$1,777,000	\$8.46

From Table 16, the total OPCC for the recommended improvements listed above for the 0.75 mgd AADF rerate based on utilizing a CAS process is \$1,546,000. From Table 17, the total OPCC for the recommended improvements listed above for the 0.75 mgd AADF rerate based on utilizing a MLE process is \$1,777,000.

The OPCC for each alternative includes providing optional mechanical screening and grit removal. These unit processes are not required to obtain the potential 0.75 mgd AADF rerated capacity. However, improved screening and grit removal will reduce the occurrence of ragging and grit buildup at downstream processes. Following a DEP inspection on December 2010, DEP identified in a letter dated January 10, 2011 that the screening did not appear to be sufficient based on heavy rags in the surge (flow equalization) tank.

8.0 Conclusion

During our evaluation of potential rerating of the existing 0.5 mgd Burnt Store WRF, we determined that the limiting unit process is clarification. The potential rerated capacity of the existing WRF is limited by the surface overflow rate of the clarifiers. In order to achieve a greater treatment capacity, a plant expansion including additional clarifiers, would be required. Therefore, a maximum rerated capacity of 0.75 mgd AADF is recommended. The rerating evaluation identified incremental steps for plant improvements including resultant capacity and opinions of cost at each step, up to the 0.75 mgd AADF capacity.

In addition to improvements to provide increased capacity, mechanical screening and grit removal are recommended. Although these unit processes are not required to obtain the rerated capacity, they will reduce rag and grit accumulation within the WRF and reduce the volume of biosolids to be hauled offsite.

Figures

TO THE REUSE SYSTEM R-002 6,461 gals. SECONDARY EFFLUENT SUMP TO PERCOLATION PONDS R-001 EFA-2 FFA-1 OTH-1 4,291 gallans OTH-3 EFFLUENT CHAMBER TO THE DEEP WELLS(U-001) CHLORINE CONTACT CHAMBER 2 CHLORINE CONTACT CHAMBER 1 2,300 gallon storage capacity 8,700 gallons 8,700 gallons FLOW MEASUREMENT POINTS PERCOLATION PONDS FLOW METER REUSE FLOW METER DEEP INJECTION WELLS FLOW METER INFLUENT FLOW METER FB-1 FLW-01 OTH-3 OTH-1 0ТН-2 DISC 173,480 gallons (2 tanks @ 86,740 gallons each CLARIFICATION CLARIFICATION REUSE TURBIDITY/TSS SAMPLE POINT COMPLIANCE SAMPLING POINTS REUSE FECAL SAMPLE POINT INFLUENT SAMPLE POINT EFLUENT SAMPLE POINT WAS RAS 300,000 gallons (2 tanks @ 150,000 gallons each EXTENDED
AERATION EXTENDED
AERATION INF-1 EFB-1 EFA-1 EFA-2 100,000 gallons FLOW AEROBIC DIGESTION © CHLORINE RESDUAL CONTROLLER SAMPLE POINT (pH) PH CONTROLLER SAMPLE POINT TURBIDITY CONTROLLER SAMPLE POINT HEADWORKS (MANUAL BARSCREEN) FLW-01 INF - 1 LEGEND RAW INFLUENT





FIGURE 1

ACOM Technical Services, Inc. 4415. Were Perveys, Solle 404 Fort Weres, Texido 3,3316 For 1937, 293 78,1937 T. Lepimerring Backwas No. (BB-B115)

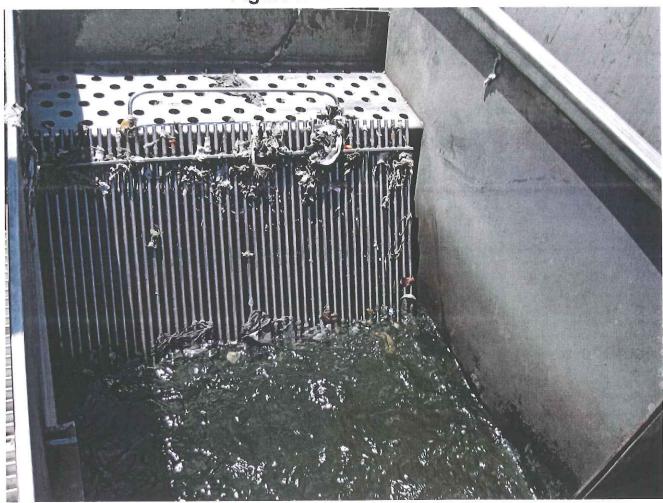


Figure 2- Headworks

Figure 3- Flow Equalization



Figure 4- Aeration Basins



Figure 5- Aeration Blowers



Figure 6- Clarification



Figure 7- Aerobic Digester



FASC

Figure 8- RAS and WAS Pumps

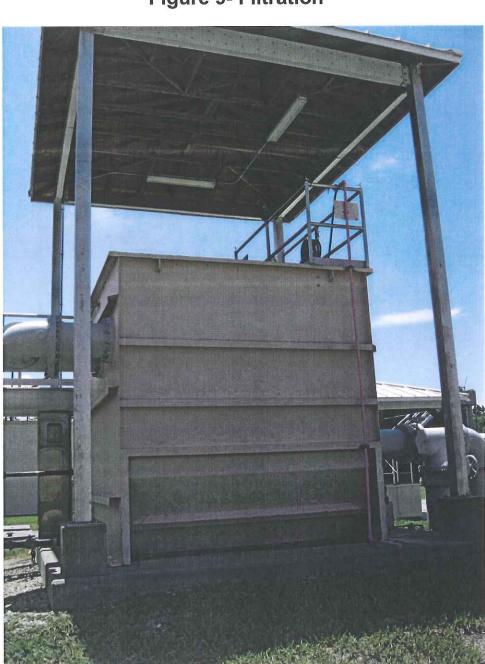


Figure 9- Filtration

Figure 10- Chlorine Contact



Figure 11- Sodium Hypochlorite Storage



Figure 12- Effluent Chamber



Figure 13- Reuse System Pumps



Figure 14- Percolation Ponds



Figure 15- Deep Injection Well (IW-2)



Appendix A Current DEP Permit for Burnt Store WRF



Florida Department of **Environmental Protection**

Jeff Kottkamp

Lt. Governor

Charlie Crist

Governor

Michael W. Sole Secretary

South District P.O. Box 2549 Fort Myers, Florida 33902-2549.

CERTIFIED MAIL NO.: 7005 3110 0002 9314 3324 RETURN RECEIPT REQUESTED

In the Matter of an Application for Permit by:

Mr. Jeff Pearson **Utilities Director Charlotte County Utilities** 25550 Harbor View Rd., Unit 1 Port Charlotte, FL 33980-2500

Charlotte County - DW **Burnt Store WWTP** P.A. File No. FLA014083-013-DW1P Charlotte Harbor Basin

NOTICE OF PERMIT ISSUANCE

Enclosed is permit number FLA014083 to operate and re-rate an existing domestic wastewater treatment plant, issued under Section 403.087 of the Florida Stautes.

Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any,

Any party to this order (permit) has the right to seek judicial review of the permit under Section 120.68, Florida Statutes, by the filing of a Notice of Appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Mail Station 35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this notice is filed with the clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Ion M. Iglehart Director of

District Management

Page 1 of 2

FACILITY:

Burnt Store WWTP

PERMITTEE:

Charlotte County Utilities

PA File No.: FLA014083-013-DW1P

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52, Florida Statutes, with the designated deputy clerk, receipt of which is hereby acknowledged.

Clark

Date

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on December 20, 2007 to the listed persons.

JMI/RW/jl

Copies furnished to:
Brian Houston, P.E.
Julie Karleskint, P.E.
James Harcourt, DEP—Fort Myers
Keith Kleinmann, DEP—Fort Myers



Florida Department of Environmental Protection

Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

South District P.O. Box 2549 Fort Myers, Florida 33902-2549

STATE OF FLORIDA

PERMIT NUMBER:

PA FILE NUMBER:

EXPIRATION DATE:

ISSUANCE DATE:

FLA014083

FLA014083-013-DW1P

December 20, 2007

December 19, 2012

DOMESTIC WASTEWATER FACILITY PERMIT

PERMITTEE:

Charlotte County Utilities

RESPONSIBLE AUTHORITY:

Mr. Jeff Pearson, Utilities Director 25550 Harbor View Rd., Unit 1 Port Charlotte, FL 33980-2500 (941) 764-4507

FACILITY:

Burnt Store WWTP 17430 Burnt Store Rd. Punta Gorda, FL

Charlotte County

Latitude: 26° 46' 18" N

Longitude: 82° 02' 00" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to operate the facilities shown on the application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

TREATMENT FACILITIES:

Re-rate an existing 0,250 MGD three-month average daily flow (TMADF) permitted capacity domestic wastewater treatment plant to a 0.500 MGD annual average daily flow (AADF) permitted capacity domestic wastewater treatment plant consisting of: influent screening; 100,000 gallons flow equalization; two 150,000-gallon aeration tanks; two 86,740-gallon clarifiers; disk filter of 0.500 MGD capacity; two 8,700-gallon chlorine contact tanks; a 4,291-gallon effluent chamber; a 6,461-gallon reuse sump; a secondary effluent sump; and an aerobic digester.

DISPOSAL:

Underground Injection: An existing 0.564 MGD monthly average daily flow (MADF) permitted capacity underground injection well system U-001 consisting of one Class I underground injection wells permitted under Department permit number(s) 44562-020-UO discharging to Class G-IV ground water. Underground injection well system U-001 is located approximately at latitude 26 ° 46' 15" N, longitude 82 ° 02' 20" W.

REUSE:

Land Application: An existing 0.250 MGD annual average daily flow (AADF) permitted capacity rapid infiltration basin system (R-001). R-001 consists of four percolation ponds located approximately at latitude 26° 46′ 18" N, longitude 82° 02′ 00" W.

Land Application: A new 1.030 MGD annual average daily flow (AADF) permitted capacity slow-rate public access reuse system (R-002). R-002 consists of public access reuse landscape irrigation.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in Pages 1 through 23 of this permit.

25550 Harbor View Rd. Unit 1 Charlotte County Utilities Burnt Store WWTP FACILITY: PERMITTEE:

Port Charlotte, FL 33980-2500

FLA014083 FLA014083-013-DW1P PERWIT NUMBER: P.A. FILE NUMBER:

I. RECLAIMED WATER AND EFFLUENT DIMITATIONS AND MONITORING REQUIREMENTS

A. Underground Injection Control Systems

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge effluent to Underground Injection Well Facility U-001 located at on-site disposal well shared with Burnt Store's Reverse Osmosis facility. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with condition I.C.I.I.

		.		EMuent Limitations	mitations			Monitoring Requirements			
Parameter	Units	Max/Min	Annual	Monthly	Weekly	Single	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes	<u></u>
	MGD	Maximum	Report	0.564	*.	•	5 Days/Week	Recording flow meters and totalizers	•	See Cond:I.A.3	<u> </u>
BOD, Carbonaceous 5 day, 20C	MG/L	МG/L Махітит	20.0	30.0	45.0	0:09	Weekly	8-hour flow proportioned composite	EFA-01		
Solids, Total Suspended	MG/L	Maximum	20.0	30.0	45.0	0.09	Weekly	8-hour flow proportioned composite	EFA-01		
	ns	Range	,	ï	t.	6.0 to 8.5	5 Days/Week	Grab	EFA-01	:	

FACILITY:

Burnt Store WWTP

PERMITTEE: Charlotte County Utilities

25550 Harbor View Rd. Unit 1 Port Charlotte, FL 33980-2500 PERMIT NUMBER: P.A. FILE NUMBER:

FLA014083

FLA014083-013-DW1P

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I. A. 1. and as described below:

Monitoring Location Site Number	Description of Monitoring Location
EFA-01	Sample collected at discharge from chlorine contact chamber.
OTH-03	Deep well U-001 flow meter located on discharge line to the underground injection well.

- 3. Recording flow meters and totalizers shall be utilized to measure flow and calibrated at least annually. [62-601.200(17) and .500(6)]
- 4. The permittee must maintain the capability for disinfection at a level that is consistent with the alternate disposal mechanism approved for this facility pursuant to Rule 62-600.540(5), F.A.C. [62-600.540(1)]

Charlotte County Utilities Burnt Store WWTP FACIUM ?: PERMITTEE:

FLA014083-013-DW1P

PERWIT NUMBER: P.A. FILE NUMBER:

25550 Harbor View Rd., Unit 1 Port Charlotte, FL 33980-2500

B. Reuse and Land Application Systems

During the period beginning on the issuance date and lasting through the expiration date of this permit the permittee is authorized to direct reclaimed water to Reuse System R-001. Such reclaimed water shall be limited and monitored by the permittee as specified below and reported in accordance with condition LC.11:

			R	Reclaimed Water Limitations	er Limitation	s	V	Monitoring Requirements		
Parameter	Units	Max/Min	Annual Average.	Monthly Average	Weekly	Single. Sample	Monitoring Erequency	Sample Type	Monitoring Location Site	Notes
Flow	ДДЖ	Maximum	0:250	Report	į	•	5 Days/Week	Recording flow meters and totalizers	OTH-01	See Cond.I.B.3
BOD, Carbonaceous Siday, 20C	MG/L	Maximum	20.0	30.0	45.0	0.09	Weekly	8-hour flow proportioned composite	EFA-01	
Solids, Total Suspended	MG/L	Maximum	20,0	30.0	45.0	60.0	Weekly	8-from Tow proportioned composite	EFA-01	
рН	ns	Range	ļ	1.	£	6.0 to 8.5	5 Days/Week	Grab	EFA-01	Sce. Cond.I.B.6
Coliform, Fecal (bacteria)	TM001/#	Maximum		See Permit Condition LB.4.	ndition LB.4.		Every Two Weeks	Grab	EFA-01	See Cond.I.B.6
Total Residual Chlorine (For Disinfection)	MG/L	Minimum	ij	•)	5.0	5 Days/Week	Grab	EFA-0.1	See Cond.LB.5,6
Nitrogen, Nitrate, Total (as N)	MG/L	Maximum	•			12.0	Every Two Weeks	8-hour flow proportioned composite	EPA-01	

Burnt Store WWTP Charlotte County Utilities

25550 Harbor View Rd. Unit 1 Port Charlotte, FL 33980-2500 PERMIT NUMBER: P.A. FILE NUMBER:

FLA014083

FLA014083-013-DWIP

Reclaimed water samples shall be taken at the monitoring site locations listed in Permit Condition I. B. 1. and as described below:

Monitoring Location Site Number	Description of Monitoring Location
EFA-01	Sample collected at the discharge from chlorine contact chamber.
OTH-01	Effluent flow measurement obtained from meter at effluent v-notch weir,

- 3. Recording flow meters and totalizers shall be utilized to measure flow and calibrated at least annually. [62-601.200(17) and .500(6)]
- 4. The arithmetic mean of the monthly fecal coliform values collected during an annual period shall not exceed 200 per 100 mL of reclaimed water sample. The geometric mean of the fecal coliform values for a minimum of 10 samples of reclaimed water, each collected on a separate day during a period of 30 consecutive days (monthly), shall not exceed 200 per 100 mL of sample. No more than 10 percent of the samples collected (the 90th percentile value) during a period of 30 consecutive days shall exceed 400 fecal coliform values per 100 mL of sample. Any one sample shall not exceed 800 fecal coliform values per 100 mL of sample. Note: To report the 90th percentile value, list the fecal coliform values obtained during the month in ascending order. Report the value of the sample that corresponds to the 90th percentile (multiply the number of samples by 0.9). For example, for 30 samples, report the corresponding fecal coliform number for the 27th value of ascending order. [62-610.510 and 62-600.440(4)(c)]
- 5. A minimum of 0.5 mg/L total residual chlorine must be maintained for a minimum contact time of 15 minutes based on peak hourly flow. [62-610.510 and 62-600.440(4)(b)]
- Grab samples shall be collected during periods of minimal treatment plant pollutant removal efficiencies or maximum organic loading in the reclaimed water or effluent. [62-600.740(1)(a)2]

FACILITY: Burnt Store WWTP
PERMITTEE: Charlotte County Utilities

FLA014083-013-DW1P

PERMUT NUMBER. P.A. FILE NUMBER.

> 25550 Harbor View Rd. Unit 1 Port Charlotte, FL 33980-2500

During the period beginning upon placing the public access reuse facilities into operation and lasting through the expiration date of this permit, the permittee is authorized to direct reclaimed water to Reuse System R-002. Such reclaimed water shall be limited and monitored by the permittee as specified below and reported in accordance with condition LC.11: ۲.

			E.	eclaimed Wa	Reclaimed Water Limitations	Str	- 	Monitoring Requirements		
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow	MGD	Maximum	1.030	Report	• ·	Ķ	5 Days/Week	Recording flow meters and totalizers	OTH-02	Sec Cond.I.B.9
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	20.0	30.0	45.0	0.09	Weekly	8-hour flow proportioned composite	EFA-01	
Solids, Total Suspended	MG/L	Maximum	ì	1	1	5.0	Daily	Grab	10-833	
Hď	ાજ	Range	•	•	•	6.0 to 8.5	5 Days/Week	Grab	EFA-01	
Coliform, Fecal, % less than detection	PERCENT	Minimum	<i>a</i> ,	see Permit Co	See Permit Condition I.B. 10.)(Daily	Grab	EFA-02	
Coliform, Fecal (bacteria).	#/100ML	Maximum	•	sec Permit Co	Sec Permit Condition (LB.310)		Daily	Grab	EFA-02	
Total Residual Chlorine (For Disinfection)	MG/L	Minimum		1	•	1.0	Continuous.	Moter	EFA-01	Sec Cond.I.B.11
Turbidity	NTU	Maximum	άi	ee Permit Co	See Permit Condition I.B.12	22	Continuous	Meter	EFB-01	
Giardia	CYSTS/ 100 L	Maximum	•	*	į	Report	Every Five Years	Filtered	EFA-02	
Cryptosporidium	00CYSTS/ 100 L	Maximum	•	•	•	Report	Every Five Years	Filtered	EFA-02	

FACILITY:

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PERMITTEE: Charlotte County Utilities

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8. Reclaimed water samples shall be taken at the monitoring site locations listed in Permit Condition I. B. 7. and as described below:

Monitoring Location Site Number	Description of Monitoring Location
EFA-01	Sample collected from the chlorine contact chamber.
EFA-02	Sample collected at the discharge from chlorine contact chamber and before disposal to the slow-rate land application reuse system R-002.
EFB-01	Sample collected after filtration and before chlorine disinfection,
OTI-102	Reuse flow meter.

- Recording flow meters and totalizers shall be utilized to measure flow and calibrated at least annually. [62-601.200(17) and .500(6)]
- 10. Over a 30-day period, at least 75 percent of the fecal coliform values shall be below the detection limits. No sample shall exceed 25 fecal coliforms per 100 mL. No sample shall exceed 5.0 mg/L of total suspended solids (TSS) at a point before the application of the disinfectant. Note: To report the "% less than detection," count the number of fecal coliform observations that were less than detection, divide by the total number of fecal coliform observations in the month, and multiply by 100% (round to the nearest integer). [62-600.440(5)(f)]
- 11. The minimum total chlorine residual shall be limited as described in the approved operating protocol, such that the permit limitation for fecal coliform bacteria will be achieved. In no case shall the total chlorine residual be less than 1.0 mg/L. [62-600.440(5)(b); 62-610.460(2); and 62-610.463(2)]
- 12. The maximum turbidity shall be limited as described in the approved operating protocol, such that the permit limitations for total suspended solids and fecal coliforms will be achieved. [82-610,463(2)]

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C. Other Limitations and Monitoring and Reporting Requirements

1. During the period beginning on the issuance date of this permit and lasting through the expiration date of this permit, the treatment facility shall be limited and monitored by the permittee as specified below and reported in accordance with condition LC [1].

			;	Limitations	tions			Monitoring Requirements		The state of the s
Parameter	Units	MaxMin	Annual	Monthly Average	Weekly	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow	MGD	Махітит	0.500	Report	•	•	5 Days/Week	Recording flow meters and totalizers	FLW-01	Sec Cond.I.C.3,.5
Percent Capacity, (TMADF/Permitted Capacity) x: 100	PERCENT Maximum	Maximum	•	Report		4.000 to 3	Monthly	Calculated	CAL-01	
BOD, Carbonaccous 5 day, 20C	MG/L	Maximum	•	Report		•	Weekly	8-hour flow proportioned composite	INF-01	See Cond.I.C.4
Solids, Total Suspended	אפער	Maximum	1	Report	•	ı	Weekly	8-itour flow proportioned composite	INF-01	See Cond.I.C.4

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2. Samples shall be taken at the monitoring site locations listed in Permit Condition 1, C. 1 and as described below:

Monitoring Location Site Number	Description of Monitoring Location
FLW-01	Influent flow meter with totalizer and recorder.
CAL-01	Calculated from FLW-01 flow measurements.
INF-01	Influent sample collected at discharge to bar screen at plant headworks.

- 3. The annual average daily flow to the treatment plant shall not exceed 0.500 MGD.
- 4. Influent samples shall be collected so that they do not contain digester supernatant or return activated sludge, or any other plant process recycled waters. [62-601.500(4)]
- 5. Recording flow meters and totalizers shall be utilized to measure flow and calibrated at least annually. [62-601,200(17) and .500(6)]
- 6. The treatment facilities shall be operated in accordance with all approved operating protocols. Only reclaimed water that meets the criteria established in the approved operating protocol(s) may be released to system storage on to the reuse system. Reclaimed water that fails to meet the criteria in the approved operating protocol(s) shall be directed to the following permitted alternate discharge system: percolation pond system, or the underground injection well system. The operating protocol(s) shall be reviewed and updated periodically to ensure continuous compliance with the minimum treatment and disinfection requirements. Updated operating protocols shall be submitted to the Department for review and approval upon revision of the operating protocol(s) and with each permit application. [62-610.320(6) and 62-610.463(2)7
- 7. Instruments for continuous on-line monitoring of total residual chlorine and turbidity shall be equipped with an automated data logging or recording device. [62-610.463(2) & .865(8)(d)]
- 8. Intervals between sampling for Giardia and Cryptosporidium shall not exceed five years. Sampling results shall be reported on DEP Form 62-610.300(4)(a)4 which is attached to this permit. This form shall be submitted to the Department and to DEP's Reuse Coordinator in Tallahassee. [62-610.463(4)]
- 9. Parameters which must be monitored as a result of a surface water discharge shall be analyzed using a sufficiently sensitive method to assure compliance with applicable water quality standards and effluent limitations in accordance with 40 CFR (Code of Federal Regulations) Part 136. All monitoring shall be representative of the monitored activity. [62-620,320(6)]
- 10. The permittee shall provide safe access points for obtaining representative influent, reclaimed water, and effluent samples which are required by this permit, [62-601.500(5)]
- 11. Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Department's South District Office Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e., monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below:

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REPORT Type	Monitoring Period	Due Date
Monthly or Toxicity	First day of month - last day of month	28th day of following month
Quarterly	January 1 - March 31 April 1 - June 30 July 1 - September 30 October 1 - December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 – June 30 July 1 – December 31	July 28 January 28
Annual	January I - December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge. The permittee shall make copies of the attached DMR form(s) and shall submit the completed DMR form(s) to the Department's South District Office at the address specified in Permit Condition I.C. 15 by the twenty-eighth (28th) of the month following the month of operation.

[62-620,610(18)][62-601.300(1), (2), and (3)]

- 12. During the period of operation authorized by this permit, reclaimed water or effluent shall be monitored annually for the primary and secondary drinking water standards contained in Chapter 62-550, F.A.C., (except for turbidity, color, and corrosivity). Twenty-four hour composite samples shall be used to analyze reclaimed water or effluent for the primary and secondary drinking water standards. These monitoring results shall be reported to the Department annually on the DMR. During years when a permit is not renewed, a certification stating that no new non-domestic wastewater discharges have been added to the collection system since the last reclaimed water or effluent analysis was conducted may be submitted in lieu of the report. The annual reclaimed water or effluent analysis report or the certification shall be completed and submitted in a timely manner so as to be received by the Department's South District Office by June 28 of each year. Approved analytical methods identified in Rule 62-620.100(3)(i), F.A.C., shall be used for the analysis. If no method is included for a parameter, methods specified in Chapter 62-550, F.A.C., shall be used. [62-601.300(4)][62-601.500(3)][62-610.300(4)]
- 13. The permittee shall submit an Annual Reuse Report using DEP Form 62-610,300(4)(a)2. on or before January 1 of each year, [62-610.870(3)]
- 14. The permittee shall maintain an inventory of storage systems. The inventory shall be submitted to the Department at least 30 days before reclaimed water will be introduced into any new storage system. The inventory of storage systems shall be attached to the annual submittal of the Annual Reuse Report. [62-610.464(5)]
- 15. Unless specified otherwise in this permit, all reports and other information required by this permit, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's South District Office at the address specified below:

South District Office Department of Environmental Protection P. O. Box 2549 Fort Myers, Florida 33902-2549

Phone Number - 239-332-6975 FAX Number - 239-338-2605

All FAX copies shall be followed by original copies. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. [62-620.305]

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II. RESIDUALS MANAGEMENT REQUIREMENTS

- 1. The method of residuals use or disposal by this facility is: transport to the East Port WRF (DEP facility no. FL0040291), located in Port Charlotte, Florida; or disposal in a Class I or II solid waste landfill.
- 2. If the permittee wishes to land apply residuals in the future, the permittee shall make application to the Department for a minor revision to the permit conditions in accordance with F.A.C. Rule 62-620.325(2)(c)2.c., before any land application.
- 3. The permittee shall be responsible for proper treatment, management, use, and land application or disposal of its residuals. [62-640.300(5)]
- 4. The permittee shall not be held responsible for treatment, management, use, or land application violations that occur after its residuals have been accepted by a permitted residuals management facility with which the source facility has an agreement in accordance with Rule 62-640.880(1)(c), F.A.C., for further treatment, management, use or land application. [62-640.300(5)]
- 5. Disposal of residuals, septage, and other solids in a solid waste landfill, or disposal by placement on land for purposes other than soil conditioning or fertilization, such as at a monofill, surface impoundment, waste pile, or dedicated site, shall be in accordance with Chapter 62-701, F.A.C. [62-640.100(6)(k)] & 4]
- 6. If the permittee intends to accept residuals from other facilities, a permit revision is required pursuant to Rule 62-640.880(2)(d), F.A.C. [62-640.880(2)(d)]
- 7. The permittee shall keep hauling records to track the transport of residuals between facilities. The hauling records shall contain the following information:

Source Facility

- 1. Date and Time Shipped.
- 2. Amount of Residuals Shipped.
- 3. Degree of Treatment (if applicable),
- 4. Name and ID Number of Residuals .

 Management Facility or Treatment
 Facility.
- Signature of Responsible Party at Source Facility.
- Signature of Hauler and Name of Hauling Firm.

Residuals Management Facility or Treatment Facility

- 1. Date and Time Received.
- 2. Amount of Residuals Received.
- 3. Name and ID Number of Source Facility.
- 4. Signature of Hauler.
- Signature of Responsible Party at Residuals Management Facility or Treatment Facility.

These records shall be kept for five years and shall be made available for inspection upon request by the Department. A copy of the hauling records information maintained by the source facility shall be provided upon delivery of the residuals to the residuals management facility or treatment facility. The permittee shall report to the Department within 24 hours of discovery any discrepancy in the quantity of residuals leaving the source facility and arriving at the residuals management facility or treatment facility. [62-640.880(4)]

8. Storage of residuals or other solids at the permitted facility shall require prior written notification to the Department. [62-640.300(4)]

III. GROUND WATER REQUIREMENTS

Construction Requirements

Section Construction Requirements is not applicable to this facility.

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Operational Requirements

- For the Part IV land application system(s), all ground water quality criteria specified in Chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge. The zone of discharge for this project shall extend horizontally 100 feet from the application site or to the facility's property line, whichever is less, and vertically to the base of the shallow water table aquifer. [62-520.200(23)][62-522.400 and 62-522.410]
- 2. The ground water minimum criteria specified in Rule 62-520.400 F.A.C., shall be met within the zone of discharge. [62-520.400 and 62-520.420(4)]
- 3. During the period of operation authorized by this permit, the permittee shall sample ground water in accordance with this permit and the approved ground water monitoring plan prepared in accordance with Rule 62-522.600, F.A.C. [62-522.600][62-610.510]
- 4. Ground water monitoring for U-001 shall be in accordance with permit number(s) 44562-020-UO.
- 5. The following monitoring wells shall be sampled in accordance with the monitoring frequencies specified in Permit Condition 111.6. for Reuse System R-001. Quarterly sampling must be reasonably spaced to be representative of potentially changing conditions. <u>Note:</u> The sampling of well MWC-90055 is not required until Tern Bay Development becomes a reclaimed water user.

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Aquifer Monitored	New or Existing
MW1-20044	BSU-9 Intermediate well	Surficial	Existing
MWI-20045	BSU-8 Intermediate well	Surficial	Existing
MWC-20046	BSU-7 Compliance well	Surficial	Existing
MWB-20047	BSU-3 Background well	Surficial	Existing
MWC-20048	BSU-6 Compliance well	Surficial	Existing
MWI-20049	BSU-2 Intermediate well	Surficial	Existing
MW1-20050	BSU-1 Intermediate well	Surficial	Existing
MW1-43337	BSU-4 Site boundary well	Surficial	Existing
MWI-43338	BSU-5 Site boundary well	Surficial	Existing
MWC-90055	BSU-10 Compliance well	Sufficial	Existing

MWB = Buckground; MWI = Intermediate; MWC = Compliance

[62-522.600][62-610.510(3)]

6. The following parameters shall be analyzed for monitoring wells BSU-2, BSU-3, BSU-7, and BSU-9 identified in Permit Condition(s) III. 5 of this permit:

Parameter	Compliance Well Limit	Ûnits Units	Sample Type	Monitoring Frequency
Water Level Relative to NGVD	Report	FEET	ln-situ	Quarterly
Nitrogen, Nitrate, Total (us N)	10	MG/L	Grab	Quarterly
Solids, Total Dissolved (TDS)	500	MG/L	Grab	Quarterly
Arsenie, Total Recoverable	10,	UG/L	Grab	Quarterly
Chloride (as Cl)	250	MG/I ₂	Grab	Quarterly
Cadmium, Total Recoverable	5	ÚG/Ľ	Grab	Quarterly
Chromium, Yotal Recoverable	100	UG/L	Grab	Quarterly
Lead, Total Recoverable	15	UG/I	Grab	Quarterly
Coliform, Fecal	4	#/100ML	Grab	Quarterly
pH	6.5 to 8.5	SU	In-situ	Quarterly
Sulfate, Fotal	250	MG/L	Grab	Quarterly
Oxygen, Dissolved	Report	MG/L	ln-situ	Quarterly
Sodium, Dissolved	160	MG/L	ln-situ	Quarterly
Specific Conductance	Report	UMHO/CM	In-situ_	Quarterly
Temperature, water	Report	Degrees: C	ln•situ	Quarterly
Turbidity	Report	บาท	Grab	Quarterly

[62-522.600(11)(b)] [62-601.300(3), 62-601.700, and Figure 3 of 62-601][62-601.300(6)] [62-520.300(9)]

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- 7. If the concentration for any constituent listed in Permit Condition III. 6. in the natural background quality of the ground water is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative natural background quality shall be the prevailing standard. [62-520.420(2)]
- 8. In accordance with Part D of Form 62-620.910(10), water levels shall be recorded before evacuating wells for sample collection. Elevation references shall include the top of the well casing and land surface at each well site (NGVD allowable) at a precision of plus or minus 0.1 foot. [62-610.510(3)(b),]
- 9. Ground water monitoring wells shall be purged prior to sampling to obtain representative samples. [62-601.700(5)]
- Analyses shall be conducted on unfiltered samples, unless filtered samples have been approved by the Department's South District Office as being more representative of ground water conditions. [62-520.300(9)]
- 11. Ground water monitoring parameters shall be analyzed in accordance with Chapter 62-601, F.A.C. [62-620.610(18)]
- 12. Ground water monitoring test results shall be submitted on Part D of Form 62-620.910(10). For reuse or land application projects, results shall be submitted with the DMR for each month listed in the following schedule. The submitted results shall be for each year during the period of operation allowed by this permit in accordance with Permit Condition 1.C.11. [62-522.600(10) and (11)(b)] [62-601.300(3), 62.601.700, and Figure 3 of 62-601] [62-620.610(18)]

SAMPLE PERIOD	REPORT DUE DATE
January - March	April 28
April - June	July 28
July - September	October 28
October - December	January 28

- 13. If any monitoring well becomes damaged or cannot be sampled for some reason, the permittee shall notify the Department's South District Office immediately and a written report shall follow within seven days detailing the circumstances and remedial measures taken or proposed. Repair or replacement of monitoring wells shall be approved in advance by the Department's South District Office. [62-522.600][62-4.070(3)]
- 14. All piezometers and monitoring wells not part of the approved ground water monitoring plan are to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C., unless there is intent for their future use. [62-532.500(4)]

IV. ADDITIONAL REUSE AND LAND APPLICATION REQUIREMENTS

Part IV Rapid Infiltration Basins (R-001)

- 1. Advisory signs shall be posted around the site boundaries to designate the nature of the project area. [62-610.518]
- 2. The annual average hydraulic loading rate to the percolation ponds shall be limited to a maximum of 1.5 inches per day (as applied to the entire bottom area). [62-610.523(3)]
- 3. The percolation ponds normally shall be loaded for 7 days and shall be rested for 7 days. Infiltration ponds, basins, or trenches shall be allowed to dry during the resting portion of the cycle. [62-610.523(4)]
- 4. Rapid infiltration basins shall be routinely maintained to control vegetation growth and to maintain percolation capability by scarification or removal of deposited solids. Basin bottoms shall be maintained to be level. [62-610.523(6) and (7)]
- 5. Routine aquatic weed control and regular maintenance of storage pond embankments and access areas are required. [62-610.514 and 62-610.414]

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 Overflows from emergency discharge facilities on storage ponds or on infiltration ponds, basins, or trenches shall be reported as an abnormal event to the Department's South District Office within 24 hours of an occurrence. The provisions of Rule 62-610.800(9), F.A.C., shall be met: [62-610.800(9)]

Part III Public Access System(s) (R-002)

- 7. Use of reclaimed water is authorized within the general service area identified in the attached map. The following uses of reclaimed water are authorized within this general service area; Other Landscape Irrigation. [62-620.630(10)(d)]
- 8. This reuse system includes the following major user (i.e., using 0.1 MGD or more of reclaimed water):

User Name	User Type	Capacity (MGD)	Acreage
Burdette Coward	Other Landscape Irrigation	0.17	100
Tern Bay Development Co.	Other Landscape Irrigation	0.86	250
TOTAL		1.03	350

[62-610.800(5)][62-620.630(10)(b)]

- New major users of reclaimed water (i.e., using 0.1 MGD or more) may be added to the reuse system using the general
 permit described in Rule 62-610.890, F.A.C., if the requirements in this rule are complied with. Application for use of
 this general permit shall be made using Form 62-610.300(4)(a)1. [62-610.890]
- 10. Cross-connections to the potable water system are prohibited. [62-610.469(7)]
- 11. A cross-connection control program shall be implemented and/or remain in effect within the areas where reclaimed water will be provided for use. [62-610.469(7)]
- 12. The permittee shall conduct inspections within the reclaimed water service area to verify proper connections, to minimize illegal cross-connections, and to verify the proper use of reclaimed water. Inspections are required when a customer first connects to the reuse distribution system. Subsequent inspections are required as specified in the cross-connection control and inspection program. [62-610.469(7)(h)]
- 13. If a cross-connection between the potable and reclaimed water systems is discovered, the permittee shall:
 - a. Immediately discontinue potable water and/or reclaimed water service to the affected area.
 - b. 11 the potable water system is contaminated, clear the potable water lines.
 - c. Eliminate the cross-connection.
 - d. Test the affected area for other possible cross-connections.
 - e. Within 24 hours, notify the South District Office's domestic wastewater and drinking water programs.
 - Mithin 5 days of discovery of a cross-connection, submit a written report to the Department detailing: a description of the cross-connection, how the cross-connection was discovered, the exact date and time of discovery, approximate time that the cross-connection existed, the location, the cause, steps taken to eliminate the cross-connection, whether reclaimed water was consumed, and reports of possible illness, whether the drinking water system was contaminated and the steps taken to clear the drinking water system, when the cross-connection was eliminated, plan of action for testing for other possible cross-connections in the area, and an evaluation of the cross-connection control and inspection program to ensure that future cross-connections do not occur. [62-555.350(3) and 62-555.360][62-620.610(20)]

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14. Maximum obtainable separation of reclaimed water lines and potable water lines shall be provided and the minimum separation distances specified in Rule 62-610.469(7), F.A.C., shall be provided. Reuse facilities shall be color coded or marked. Underground piping which is not manufactured of metal or concrete shall be color coded using Pantone Purple 522C using light stable colorants. Underground metal and concrete pipe shall be color coded or marked using purple as the predominant color. [62-610.469(7)]

- 15. In constructing reclaimed water distribution piping, the permittee shall maintain a 75-foot setback distance from a reclaimed water transmission facility to public water supply wells. No setback distances are required to other potable water supply wells or to any nonpotable water supply wells. [62-610.471(3)]
- 16. A setback distance of 75 feet shall be maintained between the edge of the wetted area and potable water supply wells, unless the utility adopts and enforces an ordinance prohibiting potable water supply wells within the reuse service area. No setback distances are required to any nonpotable water supply well, to any surface water, to any developed areas, or to any private swimming pools, hot tubs, spas, saunas, picnic tables, barbecue pits, or barbecue grills. [62-610.471(1), (2), (5), and (7)]
- 17. Reclaimed water shall not be used to fill swimming pools, hot tubs, or wading pools. [62-610,469(4)]
- 18. Low trajectory nozzles, or other means to minimize acrosol formation shall be used within 100 feet from outdoor public eating, drinking, or bathing facilities. [62-610.471(6)]
- 19. A setback distance of 100 feet shall be maintained from indoor aesthetic features using reclaimed water to adjacent indoor public eating and drinking facilities, [62-610.471(8)]
- 20. The public shall be notified of the use of reclaimed water. This shall be accomplished by posting of advisory signs in areas where reuse is practiced, notes on scorecards, or other methods. [62-610.468(2)]
- 21. All advisory signs and labels on vaults, service boxes, or compartments that house hose bibbs along with all labels on hose bibbs, valves, and outlets shall bear the words "do not drink" and "no beber," along with the equivalent standard international symbol. In addition to the words "do not drink" and "no beber," advisory signs posted at storage ponds and decorative water features shall also bear the words "do not swim" and "no nadar" along with the equivalent standard international symbols. [62-610.468 & .469]
- 22. The permittee shall ensure that users of reclaimed water are informed about the origin, nature, and characteristics of reclaimed water; the manner in which reclaimed water can be safely used; and limitations on the use of reclaimed water. Notification is required at the time of initial connection to the reclaimed water distribution system and annually after the reuse system is placed into operation. A description of on-going public notification activities shall be included in the Annual Reuse Report. [62-610.468(6)]
- 23. Routine aquatic weed control and regular maintenance of storage pond embankments and access areas are required. [62-610.414 & 62-610.464]
- 24. Overflows from emergency discharge facilities on storage ponds shall be reported as an abnormal event to the Department's South District Office within 24 hours of an occurrence. The provisions of Rule 62-610.800(9), F.A.C., shall be met. [62-610.800(9)]

V. OPERATION AND MAINTENANCE REQUIREMENTS

During the period of operation authorized by this permit, the wastewater facilities shall be operated under the supervision
of a(n) operator(s) certified in accordance with Chapter 62-602, F.A.C. In accordance with Chapter 62-699, F.A.C., this
facility is a Category II, Class C facility and, at a minimum, operators with appropriate certification must be on the site as
follows:

A Class C or higher operator 6 hours/day for 5 days/week and one visit on each weekend day. The lead operator must be a C, or higher operator.

[62-620.630(3)] [62-699.310] [62-610.462]

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2. The lead operator shall be employed at the plant full time. "Full time" shall mean at least 4 days per week, working a minimum of 35 hours per week, including leave time. A certified operator shall be on-site and in charge of each required shift and for periods of required staffing time when the lead operator is not on-site. An operator meeting the lead operator classification level of the plant shall be available during all periods of plant operation. "Available" means able to be contacted as needed to initiate the appropriate action in a timely manner. [62-699.311(10), (5) and (1)]

- 3. An operator meeting the lead operator classification level of the plant shall be available during all periods of plant operation. "Avnilable" means able to be contacted as needed to initiate the appropriate action in a timely manner. [62-699.311(1)7
- 4. When the three-month average daily flow for the most recent three consecutive months exceeds 50 percent of the permitted capacity of the treatment plant or reuse and disposal systems, the permittee shall submit to the Department an updated capacity analysis report. The capacity analysis report shall be submitted within 180 days after the last day of the last month of the three-month period referenced above. The capacity analysis report shall be prepared in accordance with Rule 62-600.405, F.A.C. [62-600.405(3)]
- 5. The application to renew this permit shall include a detailed operation and maintenance performance report prepared in accordance with Rule 62-600.735, F.A.C. [62-600.735(1)]
- 6. The permittee shall maintain the following records and make them available for inspection on the site of the permitted facility:
 - a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
 - Copies of all reports required by the permit for at least three years from the date the report was prepared;
 - Records of all data, including reports and documents, used to complete the application for the permit for at least three years from the date the application was filed;
 - d. Monitoring information, including a copy of the laboratory certification showing the laboratory certification number. related to the residuals use and disposal activities for the time period set forth in Chapter 62-640, F.A.C., for at least three years from the date of sampling or measurement;
 - A copy of the current permit;
 - A copy of the current operation and maintenance manual as required by Chapter 62-600, F.A.C.;
 - A copy of the facility record drawings;
 - h. Copies of the licenses of the current certified operators; and
 - Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules. The logs shall, at a minimum, include identification of the plant; the signature and certification number of the operator(s) and the signature of the person(s) making any entries; date and time in and out; specific operation and maintenance activities; tests performed and samples taken; and major repairs made. The logs shall be maintained on-site in a location accessible to 24-hour inspection, protected from weather damage, and current to the last operation and maintenance performed.

[62-620.350]

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VI. SCHEDULES

This facility is not required to have a schedule of improvements at this time.

VII. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

This facility is not required to have a pretreatment program at this time. [62-625,500]

VIII. OTHER SPECIFIC CONDITIONS

- 1. The newly constructed Part III reuse system shall not be placed in service for any purpose without written approval from the Department. For projects identified in the permit as being constructed in phases, written permission is only required for the first phase. Application for approval shall be made to the Department on DEP Form 62-610.300(4)(a)3, Application for Permission to Place a Public Access Reuse System in Operation. [62-610.800(7)]
- Within six months after a facility is placed in operation, the permittee shall provide written certification to the
 Department on Form 62-620.910(13) that record drawings pursuant to Chapter 62-600, F.A.C., and that an operation and
 maintenance manual pursuant to Chapters 62-600 and 62-610, F.A.C., as applicable, are available at the location
 specified on the form. [62-620.630(7)]
- 3. The permittee shall apply for renewal of this permit at least 180 days before the expiration date of the permit using the appropriate forms listed in Rule 62-620.910, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C. The existing permit shall not expire until the Department has taken final action on the application renewal in accordance with the provisions of 62-620.335(3) and (4), F.A.C. [62-620.335(1)-(4)]
- 4. Florida water quality criteria and standards shall not be violated as a result of any discharge or land application of reclaimed water or residuals from this facility. [62-610.850(1)(a) and (2)(a)]
- 5. In the event that the treatment facilities or equipment no longer function as intended, are no longer safe in terms of public health and safety, or odor, noise, aerosol drift, or lighting adversely affects neighboring developed areas at the levels prohibited by Rule 62-600.400(2)(a), F.A.C., corrective action (which may include additional maintenance or modifications of the permitted facilities) shall be taken by the permittee. Other corrective action may be required to ensure compliance with rules of the Department. Additionally, the treatment, management, use or land application of residuals shall not cause a violation of the odor prohibition in Rule 62-296.320(2), F.A.C. [62-600.410(8) and 62-640.400(6)]
- 6. The deliberate introduction of stormwater in any amount into collection/transmission systems designed solely for the introduction (and conveyance) of domestic/industrial wastewater; or the deliberate introduction of stormwater into collection/transmission systems designed for the introduction or conveyance of combinations of storm and domestic/industrial wastewater in amounts which may reduce the efficiency of pollutant removal by the treatment plant is prohibited, except as provided by Rule 62-610.472, F.A.C. [62-604.130(3)]
- Collection/transmission system overflows shall be reported to the Department in accordance with Permit Condition 1X.
 [62-604.550] [62-620.610(20)]
- 8. The operating authority of a collection/transmission system and the permittee of a treatment plant are prohibited from accepting connections of wastewater discharges which have not received necessary pretreatment or which contain materials or pollutants (other than normal domestic wastewater constituents):
 - a. Which may cause fire or explosion hazards; or
 - Which may cause excessive corrosion or other deterioration of wastewater facilities due to chemical action or pH levels; or

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- Which are solid or viscous and obstruct flow or otherwise interfere with wastewater facility operations or treatment;
 or
- d. Which result in the wastewater temperature at the introduction of the treatment plant exceeding 40°C or otherwise inhibiting treatment; or
- e. Which result in the presence of toxic gases, vapors, or furnes that may cause worker health or safety problems.

[62-604.130(5)]

- The treatment facility, storage ponds, rapid infiltration basins, and/or infiltration trenches shall be enclosed with a fence or otherwise provided with features to discourage the entry of animals and unauthorized persons. [62-610.518(1)] [and 62-600.400(2)(b)].
- 10. Screenings and grit removed from the wastewater facilities shall be collected in suitable containers and hauled to a Department approved Class I landfill or to a landfill approved by the Department for receipt/disposal of screenings and grit. [62-701.300(1)(a)]
- 11. The Permittee shall provide verbal notice to the Department as soon as practical after discovery of a sinkhole within an area for the management or application of wastewater, wastewater residuals (sludges), or reclaimed water. The Permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department in a written report within 7 days of the sinkhole discovery. [62-4.070(3)]
- 12. The permittee shall provide adequate notice to the Department of the following:
 - Any new introduction of pollutants into the facility from an industrial discharger which would be subject to Chapter 403, F.S., and the requirements of Chapter 62-620, F.A.C. if it were directly discharging those pollutants; and
 - b. Any substantial change in the volume or character of pollutants being introduced into that facility by a source which was identified in the permit application and known to be discharging at the time the permit was issued.

Adequate notice shall include information on the quality and quantity of effluent introduced into the facility and any anticipated impact of the change on the quantity or quality of effluent or reclaimed water to be discharged from the facility.

[62-620.625(2)]

IX. GENERAL CONDITIONS

- 1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1)]
- This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2)]
- 3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3)]

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- 4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4)]
- 5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5)]
- 6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6)]
- 7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7)]
- This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8)]
- 9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit:
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.

[62-620.610(9)]

- 10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, Florida Statutes, or Rule 62-620.302, Florida Administrative Code. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10)]
- 11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. [62-620.610(11)]

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- 12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this pennit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. [62-620.610(12)]
- 13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13)]
- 14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. [62-620.610(14)]
- 15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to sufeguard public health and safety during and following inactivation or abandonment. [62-620.610(15)]
- 16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620,300 and the Department of Environmental Protection Guide to Wastewater Permitting at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620,325(2) for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620,300, F.A.C. [62-620.610(16)]
- 17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance.

[62-620.610(17)]

- 18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.
 - b. If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
 - d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.

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- e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.
- f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220 and 62-160.330, F.A.C.

[62-620.610(18)]

- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19)]
- 20. The permittee shall report to the Department any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - a. The following shall be included as information which must be reported within 24 hours under this condition:
 - Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
 - 2. Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
 - 3. Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
 - 4. Any unauthorized discharge to surface or ground waters.
 - b. Oral reports as required by this subsection shall be provided as follows:
 - 1. For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph a.4 that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the Department by calling the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge, The permittee, to the extent known, shall provide the following information to the State Warning Point:
 - a) Name, address, and telephone number of person reporting;
 - b) Name, address, and telephone number of permittee or responsible person for the discharge;
 - c) Date and time of the discharge and status of discharge (ongoing or ceased);
 - d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
 - e) Estimated amount of the discharge;
 - f) Location or address of the discharge;
 - g) Source and cause of the discharge;
 - h) Whether the discharge was contained on-site, and cleanup actions taken to date;
 - i) Description of area affected by the discharge, including name of water body affected, if any; and

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- j) Other persons or agencies contacted.
- 2. Oral reports, not otherwise required to be provided pursuant to subparagraph b.1 above, shall be provided to the Department within 24 hours from the time the permittee becomes aware of the circumstances.
- c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department shall waive the written report.

[62-620,610(20)]

21. The permittee shall report all instances of noncompliance not reported under Permit Conditions IX. 17., 18, and 19. of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition IX. 20 of this permit. [62-620,610(21)]

22. Bypass Provisions.

- Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the
 permittee affirmatively demonstrates that:
 - 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtine or preventive maintenance; and
 - 3. The permittee submitted notices as required under Permit Condition IX, 22, b. of this permit.
- b. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition IX. 20, of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- c. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition IX. 22. a. 1, through 3, of this permit.
- d. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition 1X, 22. a. through c. of this permit.

[62-620.610(22)]

23. Upset Provisions

- A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that;
 - 1. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - 2. The permitted facility was at the time being properly operated;
 - 3. The permittee submitted notice of the upset as required in Permit Condition IX. 20. of this permit; and

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- 4. The permittee complied with any remedial measures required under Permit Condition IX. 5. of this permit.
- b. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.
- c. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[62-620.610(23)]

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

120/07

Jon M. Iglehort

Director of

District Management

DATE:



Florida Department of Environmental Protection

South District P.O. Box 2549 Fort Myers, FL 33902-2549 Charlie Crist Governor

Jeff Kottkamp Lt. Gövernor

Michael W. Sole Secretary

STATE OF FLORIDA NOTICE OF PERMIT REVISION

In the Matter of an Application for Permit by:

Mr. Jeff Pearson, Utilities Director Charlotte County Utilities 25550 Harbor View Rd., Unit 1 Port Charlotte, FL 33980-2500

e-Mail: jeff.pearson@charlottefl.com Ph(941) 764-4507

Charlotte County - DW_Burnt Store WWTP 17430 Burnt Store Rd.
Punta Gorda, FL
Permit Number: FLA014083
Permit Revision Number: FLA014083-013-DW1P

Dear Mr. Pearson:

In response to your application for a revision to the wastewater permit, this is notification of the Department's revision of wastewater permit No. FLA014543 to incorporate changes, issued under section 403.087 of the Florida Statutes, as follows:

 The permittee is authorized to modify the Ground Water Monitoring Plan according to the schedule listed in table 1 below;

Table 1 - CCU Well Schedule

Abandon:	Install:	Existing Wells:	
MWI-20045 (BSU-8) MWC-20046 (BSU-7)	BSU-11 (New location)	MWI-20044 (BSU-9) MWC-90055 (BSU-10) * see note condition 9	
	BSU-12 (New location)		
MWB-20047 (BSU-3)	BSU-13 (New location)		
MWC-20048 (BSU-6)			
MWI-20049 (BSU-2)			
MWI-20050 (BSU-1)			
MWI-43337 (BSU-4)			
MWI-43338 (BSU-5)			

Construction Requirements

- 2. The permittee shall give at least 72-hours notice to the Department's South District Office, prior to the installation of any monitoring wells detailed in this permit, [62-4.070]
- 3. The QUARTERLY sampling and analysis of all new ground water monitoring wells shall begin upon proper completion of the GWMP well system. The wells shall be sampled for the parameters identified in Permit Condition III.13 and in accordance to the Department's "Standard Operating Procedures For Laboratory Operations and Sample Collection Activities," DEP-SOP-001/01, FS 2200 Ground water Sampling, January 1, 2002. [62-522.600(1). (11)(a), and (b)]
- 4. Prior to construction of new ground water monitoring wells, a soil boring shall be made at each new monitoring well location in order to establish the well depth and screen interval. [62-522.900(3)]

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- 5. Within thirty days after completion of construction of the ground water monitoring wells, a properly scaled figure depicting monitor well locations (active and abandoned) with identification numbers shall be submitted. The figure shall also include (or attached) the monitoring well, top of casing and ground surface elevations referenced to North American Vertical Datum (NAVD) to the nearest 0.1 foot, along with monitor well location latitude and longitude to the nearest 0.1 second. 62-610.412 (c)
- Within thirty days after completion of construction of the ground water monitoring wells, well completion
 reports shall be sent to the Domestic Wastewater Section, FDEP South District Office. The information is to
 be submitted on the attached form for each well, DEP Form 62-522.900(3), Monitor Well Completion Report.
 [62-522.900(3)]
- 7. In Districts, where applicable, within 30 days of completion of construction of new ground water monitor wells, the Department requests that the permittee submit the following information for each monitor well:
 - A copy of the Florida Water Management District, (WMD), State of Florida Permit Application to Construct, Repair, Modify or Abandon a Well, Form 41.10-410(I), and
 - b. A copy of the WMD Well Completion Report, Form 41.10-410(2), 62-610.412(2)(b)
- Prior to the application of effluent to the reuse/disposal site, the permittee shall sample all new ground water monitoring wells for the Primary and Secondary Drinking Water parameters included in Rule 62-550, Florida Administrative Code, Public Drinking Water Systems (excluding asbestos, acrylamide dioxin, butachlor and epichlorohydrin), and EPA Methods 601 and 602. [62-520.400 and 62-520.420] [62-522.300(1), and 62-522.600(3)(4)]
- 9. The following monitoring wells shall be sampled in accordance with the monitoring frequencies specified in Permit Condition III.6. for Reuse System R-001. Quarterly sampling must be reasonably spaced to be representative of potentially changing conditions. <u>Note</u>: The sampling of well MWC-90055 (BSU-10) is not required until Tern Bay Development becomes a reclaimed water user.

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Aquifer Monitored	New or Existing
MWI-20044	BSU-9 Intermediate Well	Surficial	Existing
MWC-90055	BSU-10 Compliance well	Surficial	Existing
MWB-92150	BSU-11 Background well	Surficial	Existing
MWC-92151	BSU-12 Compliance well	Surficial	Existing
MWC-92152	BSU-13 Compliance well	Surficial	Existing

MWB = Background; MWI = Intermediate; MWC = Compliance

10. All piezometers and monitoring wells not part of the approved ground water monitoring plan are to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C., unless there is intent for their future use. [62-532.500(4)]

All other conditions of the permit shall remain unchanged. This letter must be attached to the referenced permit and becomes a permanent part thereof.

The Department's agency action shall become final unless a timely petition for an administrative proceeding (hearing) is filed pursuant to Sections 120.569 and 120.57 of the Florida Statutes (F.S.), before the deadline for filing a petition. The procedures for petitioning for an administrative hearing are set forth below.

A person whose substantial interests are affected by the Department's permitting decision may petition for an administrative hearing in accordance with the provisions of Sections 120.569 and 120.57, F.S. The petition must contain

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the information set forth below and must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions filed by the permit applicant ("permittee") or by any of the parties listed below must be filed within fourteen (14) days of receipt of this written notice. Petitions filed by any person other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of the written notice, whichever occurs first. However, pursuant to Section 120.60(3), F.S., any person who has asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the permittee at the address indicated above at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative hearing under Sections 120.569 and 120.57, F.S. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts upon which the Department's action is based must contain the following information:

- (a) the name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the Department's permit identification number, and the name of the county in which the subject matter or activity is located;
- (b) a statement of how and when each petitioner received notice of the Department's action;
- (c) a statement of how each petitioner's substantial interests are affected by the Department's action;
- (d) a statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) a statement of facts that the petitioner contends warrant reversal or modification of the Department's action;
- (f) a concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
- (g) a statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to requesting an administrative hearing, any petitioner may elect to pursue mediation. The election may be accomplished by filing with the Department a mediation agreement with all parties to the proceeding (which include the permittee, the Department, and any person who has filed a timely and sufficient petition for hearing). The agreement must contain all the information required by Rule 28-106.404, F.A.C., and must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within ten (10) days after the deadline for filing a petition, as set forth above. Choosing mediation will not adversely affect the right to an administrative hearing if mediation does not result in a settlement.

As provided in Section 120.573, F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57, F.S., for holding an administrative hearing and issuing a final order. Unless otherwise agreed by the parties, the mediation must be concluded within sixty (60) days of the execution of the agreement. If

Minor Permit Revision
Permit Revision Number: FLA014083-013-DW1P
Burnt Store WWTP

mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons seeking to protect substantial interests that would be affected by such a modified final decision must file their petitions within the appropriate time period, as set forth above, or they shall be deemed to have waived their right to a proceeding under Sections 120.569 and 120.57, F.S. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57, F.S., remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

This action is final and effective on the date filed with the clerk of the Department unless a petition (or request for mediation) is filed in accordance with the above provisions. Upon the timely filing of a petition (or request for mediation) this order will not be effective until further order of the Department. Any party to this order has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department in the Office of General Counsel, at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty (30) days from the date when this order is filed with the clerk of the Department.

Executed in Fort Myers, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart

Director of

District Management

Date: 02/07/08

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT REVISION and all copies were mailed by certified mail before the close of business on February 7, 2008 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F.S., with the designated Department clerk, receipt of which is hereby acknowledged.

Clerk Date

JMI/BCI/il

Copies furnished to:

Vinny Licausi (<u>Vincent.licausi@charlottefl.com</u>) Ron Walters, FDEP, (<u>ron.walters@dep.state.fl.us</u>) Ron Hoffer P.G., (<u>mailto:Ron.Hoffer@charlottefl.com</u>)

STATEMENT OF BASIS FOR STATE OF FLORIDA DOMESTIC WASTEWATER FACILITY PERMIT

PERMIT NUMBER:

FLA014083

PA FILE NUMBER:

FLA014083-013-DW1P

FACILITY NAME:

Burnt Store WWTP

FACILITY LOCATION:

Punta Gorda,

Charlotte County

NAME OF PERMITTEE:

Charlotte County Utilities

PERMIT WRITER:

Ron Walters

1. BASIS FOR EFFLUENT AND RECLAIMED WATER LIMITS AND MONITORING REQUIREMENTS (INCLUDING EFFLUENT MONITORING REQUIREMENTS)

The following table provides the basis for Part I: A: provisions.

UIC System U-001 (Class I wells to Class G-IV waters):

			4.00
Parameter	Limit	Basis	Rationale
Flow (MGD)	Report	Annual Average	62-600,400(3)(b) FAC
A COLUMN TO THE TOTAL COLUMN TO THE COLUMN T	0.564	Monthly Average	62-600.400(3)(b) FAC
BOD, Carbonaceous	20.0	Annual Average	62-600.540(1) & 62-600.740(1)(b)1.a. FAC
5 day, 20C (MG/L)	30.0	Monthly Average	62-600.740(1)(b)1.b. FAC
	45.0	Weekly Average	62-600,740(1)(b)1.c. FAC
	60.0	Single Sample Max.	62-600.740(1)(b)1.d. FAC
Solids, Total	20.0	Annual Average	62-600.540(1) & 62-600.740(1)(b)1.a. FAC
Suspended (MG/L)	30.0	Monthly Average	62-600.740(1)(b)1.b. FAC
	45.0	Weekly Average	62-600.740(1)(b)1.c. FAC
	60.0	Single Sample Max.	62-600.740(1)(b)1.d FAC
pH (SU)	6.0 to 8.5	Minimum and	62-600.445 FAC
		Maximum	
Chlorine, Total	0.5	Single Sample Min.	62-610.510 & 62-600.440(4)(b) FAC
Residual (MG/L)		and the second second	
Coliform, Fecal	800	Single Sample Max.	62-600,440(4)(c)4. FAC
(#/100ML)			
Nitrogen, Nitrate,	12.0	Single Sample Max.	62-610.510(1) FAC
Total (as NO3)			
(MG/L)			

The following table provides the basis for Part I. B. provisions.

Land Application System R-001 (rapid infiltration basin):

	1	 	
Parameter	Limit	Basis	Rationale
Flow (MGD)	0.250	Annual Average	62-600.400(3)(b) & 62-610.810(5) FAC
	Report	Monthly Average	62-600.400(3)(b) FAC
BOD, Carbonaceous	20.0	Annual Average	62-610.510 & 62-600.740(1)(b)1.a. FAC
5 day, 20C (MG/L)	30.0	Monthly Average	62-600.740(1)(b)1.b. FAC
	45.0	Weekly Average	62-600.740(1)(b)1.c. FAC
	60.0	Single Sample Max.	62-600.740(1)(b)1.d. FAC
Solids, Total	20.0	Annual Average	62-610.510 & 62-600.740(1)(b)1.a. FAC
Suspended (MG/L)	30.0	Monthly Average	62-600.740(1)(b)1.b. FAC
	45.0	Weekly Average	62-600.740(1)(b)1.c. FAC
	60.0	Single Sample Max.	62-600.740(1)(b)1.d. FAC
pH (SU)	6.0 to 8.5	Minimum and	62-600.445 FAC
		Meximum	
Coliform, Fecal	200	Annual Average	62-610.510 & 62-600.440(4)(c)1. FAC
(bacteria)	200	Monthly Geo. Mean	62-600.440(4)(c)2. FAC
(#/100ML)	400	90th Percentile	62-600,440(4)(c)3, FAC
	800	Single Sample Max.	62-600,440(4)(c)4. FAC
Total Residual Chlorine (For Disinfection) (MG/L)	0.5	Minimum	62-610.510 & 62-600,440(4)(b) FAC
Nitrogen, Nitrate, Total (as N) (MG/L)	12.0	Single Sample Max.	62-610.510(1) FAC

Land Application System R-002 (slow-rate public access):

Parameter	Limit	Basis	Rationale
Flow (MGD)	1.030 Report	Annual Average Monthly Average	62-600,400(3)(b) & 62-610.810(5) FAC 62-600,400(3)(b) FAC
BOD, Carbonaceous 5 day, 20C (MG/L)	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample Max.	62-610,460 & 62-600,740(1)(b)1.a. FAC 62-600,740(1)(b)1.b. FAC 62-600,740(1)(b)1.c. FAC 62-600,740(1)(b)1.d. FAC
Solids, Total Suspended (MG/L)	5.0	Single Sample Max.	62-610.460(1) & 62-600.440(5)(f)3. FAC
pH (SU)	6.0 to 8.5	Minimum and Maximum	62-600.445 FAC
Coliform, Fecal, % less than detection (PERCENT)	75	Minimum	62-600.440(5)(f)1. FAC
Coliform, Fecal (bacteria) (#/100ML)	25	Single Sample Max.	62-610.460 & 62-600.440(5)(f)2. FAC
Total Residual Chlorine (For Disinfection) (MG/L)	1.0	Minimum	62-600.440(5(b), 62-610.460(2), & 62- 610.463(2) FAC

Parameter	Limit	Basis	Rationale
Turbidity (NTU)	Report	Single Sample Max.	62-610.463(2) FAC
Giardia (CYSTS/100 L)	Report	Single Sample Max.	62-610.463(4) FAC
Cryptosporidium (OOCYSTS/100 L)	Report	Single Sample Max.	62-610.463(4) FAC

The following table provides the basis for Part I. C. provisions.

Other Limitations and Monitoring Requirements:

Parameter	Limit	Basis	Rationale
Flow (MGD)	0,500 Report	Annual Average Monthly Average	62-600.400(3)(b) FAC 62-600.400(3)(b) FAC
Percent Capacity, (TMADI*/Permitted Capacity) x 100 (PERCENT)	Report	Monthly Average	62-600.405(4) FAC
BOD, Carbonaceous 5 day, 20C (MG/L)	Report	Monthly Average	62-601.300(1) FAC
Solids, Total Suspended (MG/L)	Report	Monthly Average	62-601.300(1) FAC
Monitoring Frequency and Sample Type	Ħ	All Parameters	62-601 FAC & 62-699 FAC and/or BPJ of permit writer
Sampling Location		All Parameters	62-601, 62-610.412, 62-610.463(1), 62- 610.568, 62-610.613 FAC and/or BPJ of permit writer

2. RESIDUALS MANAGEMENT

The method of residuals use or disposal by this facility are transport to the East Port WRF (DEP facility number FL0040291), located in Port Charlotte, Florida, or disposal in a Class I or II solid waste landfill.

3. GROUND WATER MONITORING REQUIREMENTS

Ground water monitoring requirements have been established in accordance with Rules 62-601 and 62-522, F.A.C.

4. SCHEDULES FOR IMPROVEMENT ACTIONS, CONSTRUCTION, AND ENGINEERING STUDIES

At this time, the facility is not required to develop schedules for improvement actions, construction, and engineering studies.

5. INDUSTRIAL PRETREATMENT REQUIREMENTS

At this time, the facility is not required to develop an approved industrial pretreatment program. However, the Department reserves the right to require an approved program if future conditions warrant.

6. ADMINISTRIATIVE ORDERS (AO) AND CONSENT ORDERS (CO)

This permit is not accompanied by an AO, and there are no unresolved compliance issues for this facility.

7. <u>EFFECTS OF SURFACE WATER DISCHARGE ON THREATENED OR ENDANGERED SPECIES</u>

The Department does not anticipate adverse impacts on threatened or endangered species as a result of permit issuance.

8. <u>APPLICABLE RULES</u>

The following were used as the basis of the permit limitations/conditions:

FAC refers to various portions of the Florida Administrative Code.

The effective dates of FAC Rule Chapters cited in the table are as follows:

<u>Chapter</u>	Effective Da
62-4	02-07-06
62-160	06-08-04
62-302	12-07-06
62-520	12-09-96
62-522	08-27-01
62-550	01-17-05
62-600	04-13-06
62-601	12-24-96
62-602	02-06-02
62-610	03-09-06
62-620	07-10-06
62-625	01-08-97
62-640	03-30-98
62-650	12-26-96
62-699	07-05-01

- b. FS refers to various portions of the Florida Statutes
- c. CFR refers to various portions of the Code of Federal Regulations, Title 40
- d. BPJ refers to Best Professional Judgment

Charlotte County Covernment

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www.CharlotteCountyFL.com

March 9, 2009

Dr. Abdul B. Ahmadi Department of Environmental Protection Fort Myers Regional Service Center Post Office Box 2549 Fort Myers, FL 33902-2549

Re: Addition of Reclaimed users to Burnt Store WRF FLA014083

Dear Dr. Ahmadi:

This letter is to advise you that Charlotte County Utilities is adding one minor user of reclaimed water to our Burnt Store Water Reclamation Facility. The user is the Burnt Store WRF Operations Building located at 17430 Punta Gorda, FL 33955.

We estimate the usage to be 0.0016 MGD. As required in FDEP rule appropriate signage, setbacks and cross connection control will be maintained.

Please contact me should you have any questions. Attached is a site plan for the site.

Very truly yours,

Mhcent Littausi

Superintendent of Treatment Facilities

Attachment: Site Plan

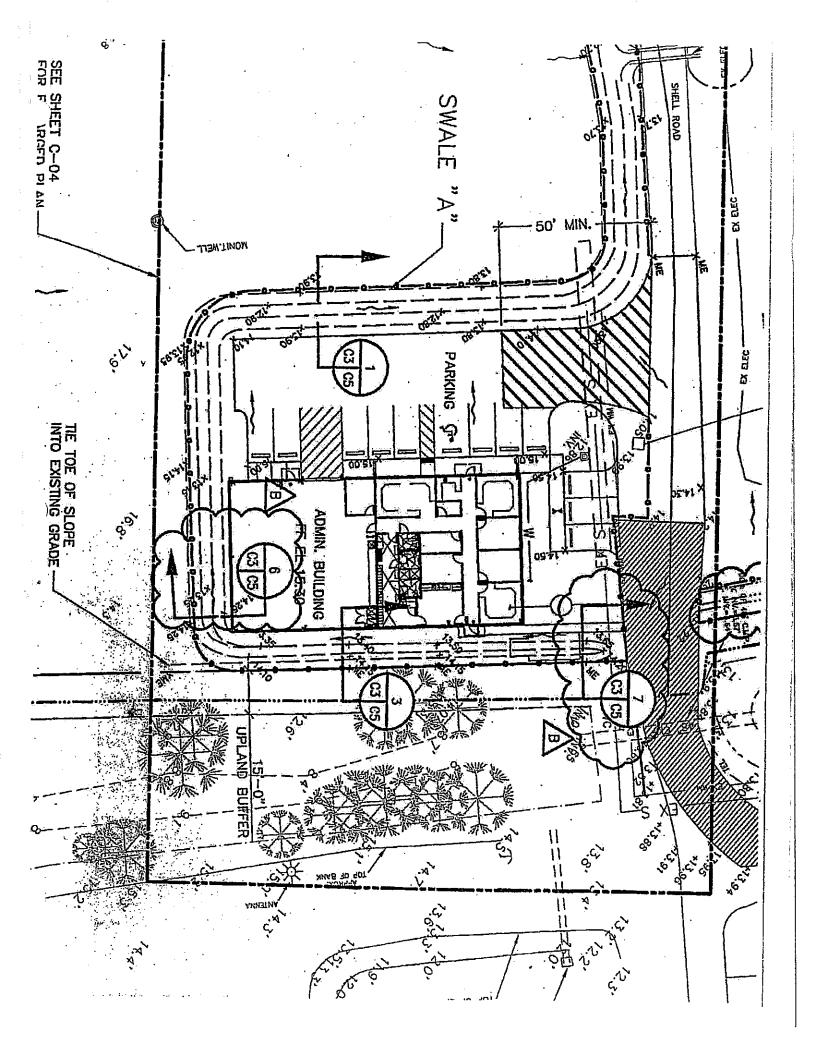
cc: Terri Kesner, Interim Utilities Director Jamie Huish, Operations Manager

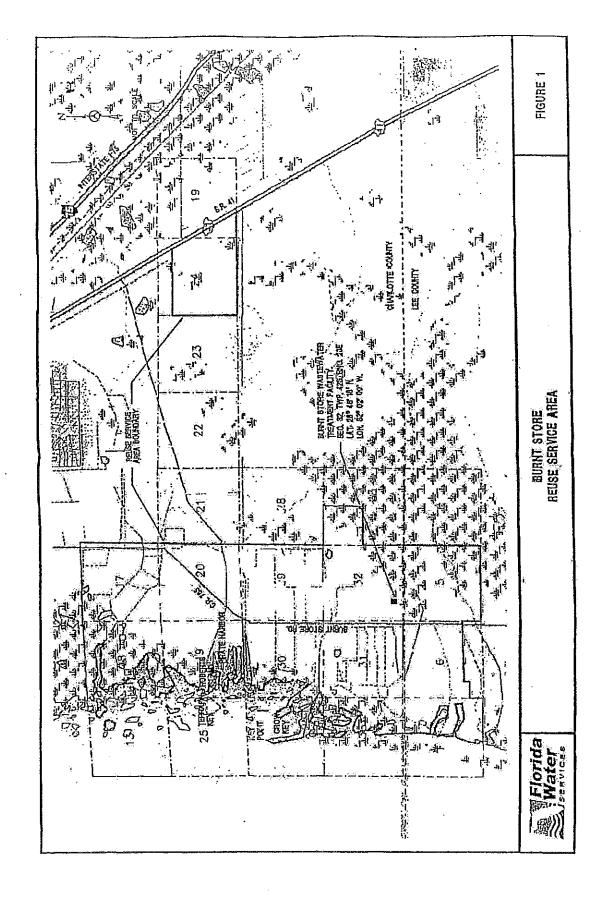
Keith Kleinmann, DEP Ft. Myers Eric Gauld, Rotonda WRF Chief Operator

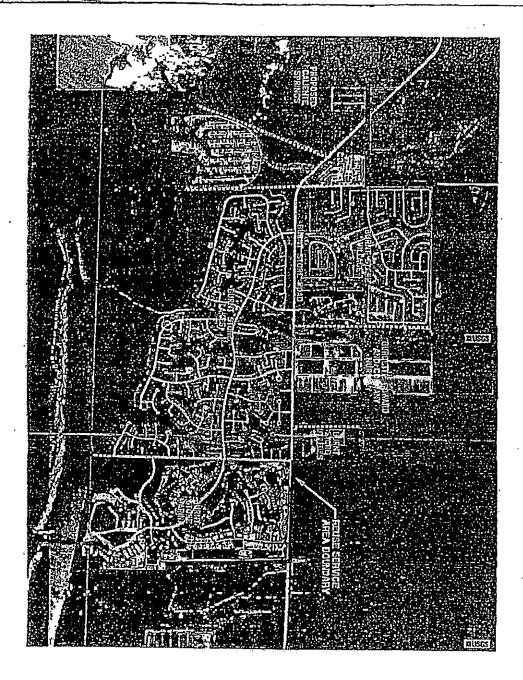
Gordon Madara, Water Quality Control Coordinator

File

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www.CharlotteCountyFL.com

March 9, 2009

Dr. Abdul B. Ahmadi Department of Environmental Protection Fort Myers Regional Service Center Post Office Box 2549 Fort Myers, FL 33902-2549

Re: Addition of Reclaimed users to Burnt Store WRF FLA014083

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Please contact me should you have any questions. Attached is a site plan for the site.

Very truly yours,

Vincent Littalisi

Superintendent of Treatment Facilities

Attachment: Site Plan

cc: Terri Kesner, Interim Utilities Director Jamie Huish, Operations Manager

Keith Kleinmann, DEP Ft. Myers

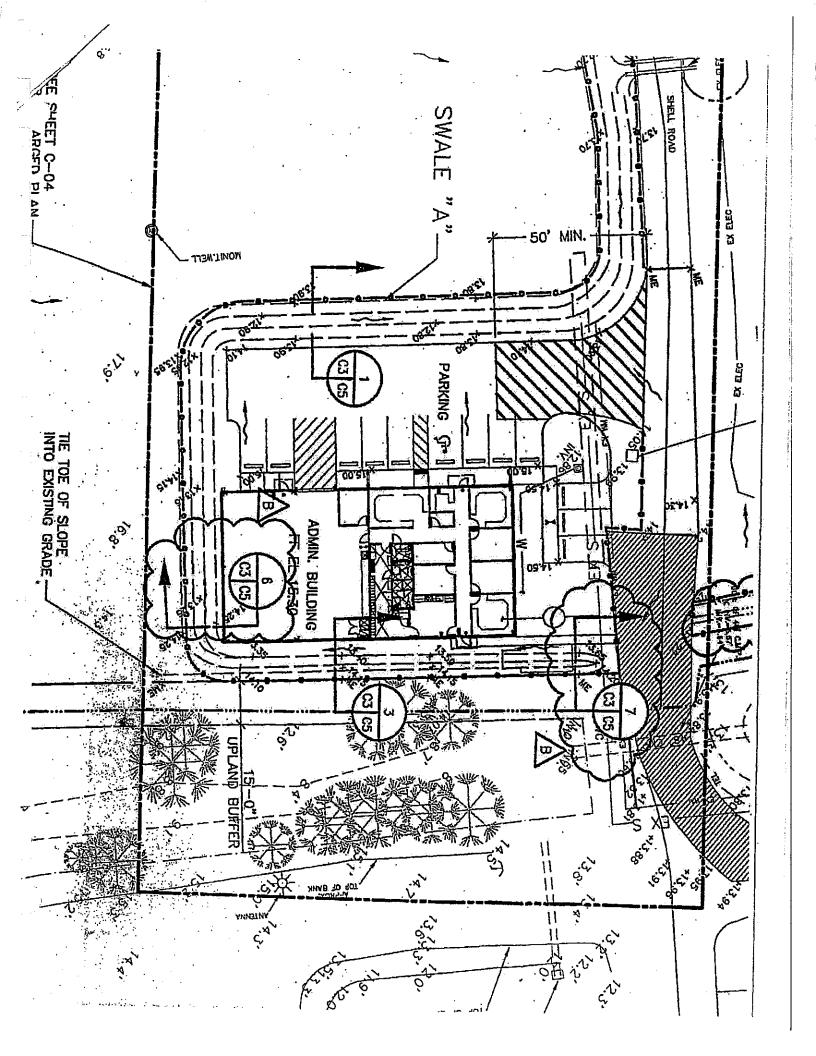
Eric Gauld, Rotonda WRF Chief Operator

Gordon Madara, Water Quality Control Coordinator

File

UTILITIES

Administration | Business Services | Community Relations Engineering Services | Finance | Operations 25550 Harbor View Road, Suite 1 | Port Charlotte, FL 33980-2503 Phone: 941.764.4300 | Fax: 941.764.4319





South District P.O. Box 2549 Fort Myers, Florida 33902-2549 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

May 27, 2010

Steve Bozman
Superintendent of Treatment Facilities
Charlotte County Utilities
25550 Harbor View Rd., Suite 1
Port Charlotte, FL 33980-2503

Re: Charlotte County - DW
Burnt Store WRF
Addition of minor users of reclaimed water.
DEP Permit Number: FLA014083
Charlotte Harbor Basin

Dear Mr. Bozman:

Thank you for your letter, dated May 19, 2010, informing the Department of the addition of an estimated 0.001 MGD minor users of reclaimed water located within the Burnt Store service area designated in DEP Permit Number FLA014083. Your May 19, 2010 letter will be added to the Department's records for this wastewater treatment facility.

Should you have any questions, please contact Ron Walters of this office at (239) 332-6975, extension 177.

Thank you for your continued cooperation.

Sincerely,

Ron Walters

Ron Walters
Engineering Specialist
Water Facilities/Wastewater Permitting
DEP, South District

RW/jl

Copy furnished to: Alyssa Mork, DEP – Fort Myers



South District P.O. Box 2549 Fort Myers, Florida 33902-2549 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

In the Matter of an Application for Permit by:

Permittee:

Charlotte County Utilities
Terri Kesner, Interim Utilities Director
25550 Harbor View Rd., Unit 1
Port Charlotte, Florida 33980
Terri.kesner@charlottefl.com

Permit Number: 44562-036-DWC/MR

Issued: September 2, 2010 Expires: September 10, 2013

Project: Burnt Store Village (Modification)

Connected to: Burnt Store WRF

County: Charlotte

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4 and 62-604, Florida Administrative Code (F.A.C).

The above named permittee is hereby authorized to construct the facilities shown on the application and other documents on file with the Department and made a part hereof and specifically described as follows:

DESCRIPTION OF PROJECT: The construction of 577 LF of 6", 356 LF of 8", and 704 LF of 10" forcemain, and the conversion of one additional airlift manhole. This project will modify Permit Number 44562-035-DWC/CM issued on September 11, 2008, per application materials received July 15, 2010, with additional information received September 1, 2010. See permit conditions number 6.

LOCATION OF PROJECT: Section 29, Township 40S, Range 23E in Port Charlotte, Charlotte County, Florida.

IN ACCORDANCE WITH: The limitations, requirements and other conditions set forth in this permit.

PERMIT CONDITIONS:

- 1. This permit is subject to the general conditions of Rule 62-4.160, F.A.C., as applicable. This rule is available at the Department's Internet site at: http://www.dep.state.fl.us/water/wastewater/rules.htm#domestic [62-4.160, 5-1-03].
- 2. Upon completion of construction of the collection/transmission system project, and before placing the facilities into operation for any purpose other than testing for leaks or testing equipment operation, the permittee shall submit to the Department's South District Office at P.O. Box 2549, Fort Myers, FL 33902-2549 (by mail) or 2295 Victoria Avenue, Suite 364, Fort Myers, FL 33901 (by other delivery service) Form 62-604.300(8)(b), Request for Approval to Place a Domestic Wastewater Collection/Transmission System into Operation. This form is available at the Department's Internet site at: http://www.dep.state.fl.us/water/wastewater/forms.htm [62-604.700(2), 11-6-03].
- 3. The new or modified collection/transmission facilities shall not be placed into service until the Department clears the project for use [62-604,700(3), 11-6-03].

PERMIT NUMBER: 44562-036-DWC/MR

PERMIT CONDITIONS:

4. Permit revisions shall only be made in accordance with Rule 62-4.050(4)(s), F.A.C. Request for revisions shall be made to the Department in writing and shall include the appropriate fee. Revisions not covered under Rule 62-4.050(4)(s), F.A.C., shall require a new permit [62-604.600(8), 11-6-03].

- 5. Abnormal events shall be reported to the Department's South District Office in accordance with Rule 62-604.550, F.A.C. For unauthorized spills of wastewater in excess of 1000 gallons per incident, or where information indicates that public health or the environment may be endangered, oral reports shall be provided to the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519 as soon as practical, but no later than 24 hours from the time the permittee or other designee becomes aware of the circumstances. Unauthorized releases or spills less than 1000 gallons per incident are to be reported orally to the Department's South District Office at phone number (239)-332-6975 within 24 hours from the time the permittee, or other designee becomes aware of the circumstances [62-604.550, 11-6-03].
- 6. This permit is for CONSTRUCTION ONLY of the collection/transmission system project. This permit does not authorizes the connection of this collection/transmission system project to the wastewater treatment plant. This permit shall not be construed to infer that the clearance necessary for connection shall be granted.

SPECIFIC PERMIT CONDITIONS

- 1. All new wastewater collection/transmission systems and modifications of existing systems shall be located at least 100 feet from a public drinking water supply well.
- 2. Except as provided in Section 62-604. 400 (3), F.A.C., sewer pipes and force mains should cross under water mains.
- 3. For sewer crossings, all crossings shall be arranged so that the sewer pipe joints are equidistant as far as possible from the water main joints. At crossings, all vacuum sewer joints must maintain a minimum distance of 3 feet from water main joints. All gravity or pressure type sanitary sewers and wastewater force main joints shall maintain a minimum distance of 6 feet from water main joints.
- 4. Except as provided under 62-604 400 (3), F.A.C. all sewers and force mains shall be laid at least 10 feet horizontally (outside to outside) from a water main and 3 feet minimum (outside to outside) from a reclaimed water pipe permitted under Part III of Chapter 62-610, F.A.C.
- 5. A vertical separation of at least 18 inches must be maintained when a sewer pipe crosses a water main, except as provided under Section 62-604.400(3), F.A.C.
- 6. When any existing asbestos cement (AC) pipes are replaced under this permit, the permittee shall do so in accordance with the applicable rules of Federal Asbestos Regulation and Florida DEP requirements. For specific requirements applicable to AC pipes, the permittee should contact the Air and Waste Management section managers prior to commencing any such activities at (239) 332-6975. Please be aware that a notification is required to be submitted to the Department for a regulated project.
- 7. At minimum, a monthly inspection of all proposed manhole submersible pumps and notation of such in the plant logbook is required.
- 8. Three spare pumps are to be kept in storage at all times for this project.
- 9. Establishment of a routine maintenance program and implementation by the utility is required for this project.

PERMIT NUMBER: 44562-036-DWC/MR

Executed in Fort Myers, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart Director of

District Management

Date Signed: September 2, 2010



South District P.O. Box 2549 Fort Myers, Florida 33902-2549 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

VIA ELECTRONIC MAIL

In the Matter of an Application for Permit by:

Permittee:

Charlotte County Utilities
Terri Kesner, Interim Utilities Director
25550 Harbor View Rd., Unit 1
Port Charlotte, Florida 33980
Terri.kesner@charlottefl.com

Permit Number: 44562-036-DWC/MR

Issued: September 2, 2010 Expires: September 10, 2013

Project: Burnt Store Village (Modification)

Connected to: Burnt Store WRF

County: Charlotte

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number 44562-036-DWC/MR to modify Permit Number 44562-035-DWC/CM pursuant to Chapter 403, Florida Statutes (FS) and Florida Administrative Code (F.A.C.) Rules 62-4 and 62-604.

The Department's proposed agency action shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes, within 14 days of receipt of notice. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, Florida Statutes. The petition must contain the information set forth below and must be filled (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the persons listed below must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), Florida Statutes, must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within 14 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within 14 days of receipt of notice shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, Florida Statutes. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the Department permit identification number and the county in which the subject matter or activity is located;
- (b) A statement of how and when each petitioner received notice of the Department action;

Page 1 of 3

"More Protection, Less Process" www.dep.state.fl.us PERMITTEE: Charlotte County Utilities PERMIT NUMBER: 44562-036-DWC/MR

(c) A statement of how each petitioner's substantial interests is affected by the Department action;

- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;
- (f) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under Section 120.573, Florida Statutes, is not available for this proceeding.

This permit action is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this permit will not be effective until further order of the Department.

Any party to the permit has the right to seek judicial review of the permit action under Section 120.68, Florida Statutes, by the filing of a notice of appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when this permit action is filed with the clerk of the Department.

Executed in Fort Myers, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart Director of

District Management

PERMITTEE: Charlotte County Utilities

PERMIT NUMBER: 44562-036-DWC/MR

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on September 2, 2010 to the listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

julio D. La mesa

9/2/10

Clerk

Date

JMI/OJO/JLI/jI

Copies provided to:

Bruce R. Bullert, P.E. bruce.bullert@charlottefl.com Ajaya Satyal, FDEP, Air Section, ajaya.satyal@dep.state.fl.us Charles Emery, FDEP, Waste Management, charles.emery@dep.state.fl.us



Charlie Crist Governor Jeff Kottkamp Lt. Governor

South District P.O. Box 2549 Fort Myers, Florida 33902-2549

Michael W. Sole Secretary

SENT VIA ELECTRONIC MAIL:

In the Matter of an Application for Permit by:

Mr. Jeff Pearson, Director of Utilities Charlotte County Utilities 25550 Harborview Rd. Port Charlotte, Florida 33982

Email: jeff.pearson@charlottefl.com

January 20, 2009

Charlotte County - UIC
File Number: 44562-034-UO11
Burnt Store Class 1 Injection Well IW-1
Class 1 Injection Well Operation Permit

NOTICE OF PERMIT

Enclosed is Permit Number 44562-034-UO11 for the Charlotte County Utilities to construct one, (1), Class V Group 6, Stormwater Drainage Injection Well located within the Burnt Store Class 1 Injection Well IW-1, 17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida. (DEP File No 44562-034-UO11). This permit is hereby issued under Section 403.087 of the Florida Statutes.

Any party to the order has the right to seek judicial review of the order under Section 120.68 of the Florida Statutes, by the filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

Executed in Lee County, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart Director of

District Management

CERTIFICATE OF SERVICE

The undersigned designated clerk hereby certifies that this **NOTICE OF PERMIT** and all copies were mailed before the close of business on January 20, 2009 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Mica	a Colenan	1-20-09	
* * *********************************	Clerk	Date	

JMI/DR/MAP/mac

Enclosure

Cc Nancy Marsh, EPA (marsh.nancy@epa.gov)
Craig Boomgaard, SFWMD (cboomgaa@sfwmd.gov)
Ron Reese, USGS (rsreese@usgs.gov)
Joe Haberfeld, FDEP (foe.haberfeld@dep.state.fl.us)
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Rick Cowles, (rcowles@pirnie.com)



South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

PERMIT

PERMITTEE:

Mr. Jeff Pearson, Director of Utilities Charlotte County Utilities 25550 Harborview Rd. Port Charlotte, Florida 33982 Email: jeff.pearson@charlottefl.com

CharlotteCounty - UIC
File Number: 44562-034-UO11
Date of Issue: January 20, 2009
Expiration Date: January 19, 2014
Latitude: 26.0° 46.0' 15.00" N
Longitude: — 82.0° 02.0' 20.00" W
Township, Section, and Range: 32/428

Township, Section, and Range: 32/42S/23E Burnt Store Class 1 Injection Well IW-1 Class 1 Injection Well Operation Permit

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-520, 62-528, 62-550, 62-600, 62-601, 62-620, and 62-660. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Operate one, (1), nominal 4.50 - inch, (4.50"), outside diameter, OD, tubing and packer assembly Class I injection well (IW-1), with 7 and five eighths - inch, (7.625"), steel casing to approximately 2528 feet below land surface (bls) and 4.50-inch OD FRP injection tubing with a packer placed to approximately 2514 feet bls and a total tubing depth of approximately 2528 feet bls. The total borehole depth is 3268 feet bls. Injection is into the Oldsmar Formation for the primary means of disposal of non-hazardous reverse osmosis concentrate from the Charlotte County Utilities Burnt Store WTP and non-hazardous secondary treated domestic wastewater from the Charlotte County Utilities Burnt Store WWTP for a maximum disposal of 0.564 million gallons per day (MGD) at a maximum injection rate of 392 gpm per well. The existing dual zone monitoring well (DZMW-1) is completed from 1207 to 1287 feet bls and from 1832 to 1868 feet bls.

The Application to Construct/Operate/Abandon Class I, III, or V Injection well System, DEP Form 62-528.900(1), was received March 5, 2008, with supporting documents and additional information last received June 3, 2008. The Certificate of Demonstration of Financial Responsibility was approved June 30, 2008. The project is located at the Burnt Store WWTP and WTP, 17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida,

Subject to Specific Conditions 1-8.

Mr. Jeff Pearson, Director of Utilities Permit/Cert No.: 44562-034-UO11
Burnt Store WWTP Date of Issue: January 20, 2009
17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida Expiration Date: January 19, 2014

SPECIFIC CONDITIONS:

GENERAL CRITERIA

- a. Any permit noncompliance constitutes a violation of the Safe Drinking Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- c. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
- d. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures.
- e. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation or reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- f. When requested by the Department, the permittee shall furnish, within the time specified, any information needed to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- g. Signatories and Certification Requirements
 - (1) All reports and other submittals required to comply with this permit shall be signed by a person authorized under Rules 62-528.340(1) or (2), F.A.C.
 - (2) In accordance with Rule 62-528.340(4), F.A.C., all reports shall contain the following certification:
 - "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- h. The permittee shall notify the Department and obtain approval prior to any physical alterations or additions to the injection or monitor well, including removal of the wellhead.
- i. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or injection activity that may result in noncompliance with permit requirements.
- j. The permittee shall report any noncompliance that may endanger health or the environment, to include:

Mr. Jeff Pearson, Director of Utilities Permit/Cert No.: 44562-034-UO11
Burnt Store WWTP Date of Issue: January 20, 2009
17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida Expiration Date: January 19, 2014

SPECIFIC CONDITIONS:

- (1) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water; or
- (2) Any noncompliance with a permit condition or malfunction of the injection system that may cause fluid migration into or between underground sources of drinking water.
- (3) Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- No underground injection is allowed that causes or allows movement of fluid into an underground source of drinking water.
- The permittee shall retain all records of all monitoring information concerning the nature and composition
 of injected fluid until five years after completion of any plugging and abandonment procedures specified
 under Rule 62-528.435, F.A.C. The permittee shall deliver the records to the Department office that
 issued the permit at the conclusion of the retention period unless the permittee elects to continue retention
 of the records.

2. OPERATING REQUIREMENTS

- a. Injection of fluids other than those permitted into the disposal wells(s) will constitute a violation of this permit and shall constitute cause for permit revocation and possible enforcement action for water quality violations.
- Injection into the well shall not exceed 392 gallons per minute (0.564 MGD) and injection pressure as measured at the wellhead shall not exceed 134 psi.
- c. In the event the permittee is temporarily unable to comply with any of the conditions of a permit due to breakdown of equipment, power outages, destruction by hazard of fire, wind, or by other cause, the permittee of the facility shall notify the Department.
 - (1) Notification shall be made in person, by telephone, or by electronic mail within 24 hours of breakdown or malfunction to the South District office.
 - (2) A written report of any noncompliance referenced in Specific Condition 2.c.1) above shall be submitted to the South District and Tallahassee offices within five days after its occurrence. The report shall describe the nature and cause of the breakdown or malfunction, the steps being taken or planned to be taken to correct the problem and prevent its reoccurrence, emergency procedures in use pending correction of the problem, and the time when the facility will again be operating in accordance with permit conditions.
- d. The permittee shall calibrate all pressure gauges, flow meters, chart recorders, and other related equipment associated with the injection well system on a semiannual basis. The permittee shall maintain all monitoring equipment and shall ensure that the monitoring equipment is calibrated and in proper operating condition at all times. Laboratory equipment, methods, and quality control will follow EPA

Mr. Jeff Pearson, Director of Utilities

Burnt Store WWTP

Date of Issue: January 20, 2009

17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida

Expiration Date: January 19, 2014

SPECIFIC CONDITIONS:

guidelines as expressed in Standard Methods for the Examination of Water and Wastewater. The pressure gauges, flow meters, and chart recorders shall be calibrated using standard engineering methods. Calibration records shall be kept by the permittee at the permitted facility and be available for inspection by Department personnel upon request.

e. In the event a well must be plugged or abandoned, the permittee shall obtain a permit from the Department as required by Chapter 62-528, Florida Administrative Code. When no longer used for their intended purpose, these wells shall be properly plugged and abandoned. Within 180 days of well abandonment, the permittee shall submit to the Department and the TAC the proposed plugging method, pursuant to Rule 62-528.460, F.A.C.

3. TESTING AND REPORTING REQUIREMENTS

- a. A specific injectivity test shall be performed quarterly on the injection well as required by Rule 62-528.430(2)(b)1.b., F.A.C. Pursuant to Rule 62-528.430(2)(d), F.A.C., the specific injectivity test shall be performed with the pumping rate to the well set at a predetermined level and reported as the specific injectivity index (gallons per minute/specific pressure). The pumping rate to be used shall be based on the expected flow, the design of the pump types, and the type of pump control used. As part of this test, the well shall be shut-in for a period of time necessary to conduct a valid observation of pressure fall-off. The specific injectivity and pressure fall-off test data shall be submitted along with the monitoring results of the injection and monitoring well data.
- b. The permittee shall demonstrate the mechanical integrity pursuant to Rule 62-528.300(6)(b) and (c), Florida Administrative Code (F.A.C.), at least once every five (5) years during the life of the well. As part of the mechanical integrity survey a video television survey shall be conducted from the surface to the bottom of the injection zone or more frequently if deemed necessary by the Department, pursuant to Rule 62-528.425(1)(d), F.A.C. The last mechanical integrity test (MIT) for injection well IW-1 was conducted on July 21, 2005. Therefore, the next mechanical integrity test on the injection well shall be completed on or before July 20, 2010.
- c. The Department must be notified seventy-two (72) hours prior to all testing for mechanical integrity on the injection wells. The testing procedure must be approved by the Department before testing begins. All testing must be initiated during daylight hours, Monday through Friday. An evaluation of all test results must be submitted with all test data.
- d. The injection system shall be monitored in accordance with Rules 62-528.425(1)(g) and 62-528.430(2), F.A.C. The following injection well performance and monitor zone data shall be recorded and reported in the Monthly Operating Report as indicated below. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

Mr. Jeff Pearson, Director of Utilities Burnt Store WWTP

Permit/Cert No.: 44562-034-U011
Date of Issue: January 20, 2009

17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida Expiration Date: January 19, 2014

SPECIFIC CONDITIONS:

INJECTION WELL IW-1

The specifications for the injection well are as follows:

Casing Diameter and Type	Depth Cased (ft bis)	Open Hole Interval (feet bls)
30" Steel	192'	
24" Steel	5513	
18" Steel	1349'	
7.625" Steel	2528'	
4.5" O.D. FRP	2514' to packer, 2528' total tubing depth	
		from 2528 to 3268

The injection well shall be monitored in accordance with the parameters and frequencies listed below. The injection pressure, annular pressure and flow rate shall be recorded continuously. The permittee shall submit monthly a summary of the monthly monitoring data developed from the injection well instrumentation. All samples shall be collected and analyzed in accordance with the quality assurance requirements of Chapter 62-160, F.A.C. The report shall include the following data:

Injection Pressure (pist)	Frequency 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Injection Pressure (psi)	Daily/Monthly
Maximum Injection Pressure	Daily/Monthly
Minimum Injection Pressure	Daily/Monthly
Average Injection Pressure	Daily/Monthly
THE HELD RIOW Rate (2 p. m.) THE REPORT OF THE PROPERTY OF THE	Recording Prequency
Flow Rate (gpm)	Daily/Monthly
Maximum Flow Rate	Daily/Monthly
Minimum Flow Rate	Daily/Monthly
Average Flow Rate	Daily/Monthly
Annular Pressure	Recording Frequency
Maximum Annular Pressure	Daily/Monthly
Minimum Annular Pressure	Daily/Monthly
Average Annular Pressure	Daily/Monthly
Fluid added to/removed from Annulus (gallons)	Daily/Monthly
Pressure added to/removed from Annulus (psi)	Daily/Monthly
. Wolume Injected	Frequency Frequency
Total Volume WTP Concentrate Injected (gallons)	Daily/Monthly
Total Volume WTP Concentrate Injected (gallons)	Daily/Monthly
Total Volume WWTP Effluent Injected (gallons)	Daily/Monthly
Total Volume WWTP Effluent Injected (gallons)	Daily/Monthly

WTP Concentrate Water Quality

Parameters Parameters	Reporting Frequency
Specific Conductivity (µmhos/cm)	Monthly
Total Dissolved Solids (mg/L)	Monthly
pH (std. units)	Monthly

Mr. Jeff Pearson, Director of Utilities Burnt Store WWTP

17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida Expiration Date: January 19, 2014

Date of Issue: January 20, 2009

Permit/Cert No.: 44562-034-UO11

SPECIFIC CONDITIONS:

Chloride (mg/L)	Monthly
Sulfate (mg/L)	Monthly
Field Temperature (°C)	Monthly
Total Kjeldahl Nitrogen (TKN) (mg/L)	Quarterly
Sodium (mg/L)	Quarterly
Calcium (mg/L)	Quarterly
Potassium (mg/L)	Quarterly
Magnesium (mg/L)	Quarterly
Iron (mg/L)	Quarterly
Bicarbonate (mg/L)	Quarterly
Radium 226 (pCi/L)	Quarterly
Radium 228 (pCi/L)	Quarterly
Gross Alpha (pCi/L)	Quarterly

MONITOR WELL SYSTEM:

The monitor well system consists of one dual-zone monitoring well as listed below:

Male Well Name Land	Casing Diameter and Type	Depth Cased (ft.bls)/Total (feet.bls)
DZMW-1	18" Steel	551
DZMW-1 (Upper)	9.625" Steel	1207
DZMW-1 (Upper)		from 1207 to 1287
DZMW-1 (Lower)	4,5" Steel	1832
DZMW-1 (Lower)		from 1832 to 1868

The monitoring parameters listed below shall be developed and reported for the monitor well listed above. The monitor well pressure or water level shall be recorded continuously. The monitor well casings shall be evacuated of three (3) to five (5) well volumes prior to collection of the water sample for analysis. The volume of water evacuated shall be based on the calculated volume of water in the well casing and sampling interval. The water sample collected shall be of sufficient volume to complete the analysis required. All samples must be analyzed by a laboratory certified in the State of Florida. The laboratory reports shall be submitted; all samples shall be collected and analyzed in accordance with the quality assurance requirements of Chapter 62-160, F.A.C. The report shall include the following data:

Parameters Reporting Frequency	
Maximum Water Level/Pressure (Ft NAVD or psi)	Daily/Monthly
Minimum Water Level/Pressure (Ft NAVD or psi)	Daily/Monthly
Average Water Level/Pressure	Daily/Monthly

Parameters 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Reporting Frequency
Specific Conductivity (µmhos/cm)	Monthly
Ammonia as N (mg/l)	Monthly
Total Dissolved Solids (mg/L)	Monthly
pH (std. units)	Monthly
Chloride (mg/L)	Monthly

Mr. Jeff Pearson, Director of Utilities Burnt Store WWTP

17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida Expiration Date: January 19, 2014

Permit/Cert No.: 44562-034-UO11 Date of Issue: January 20, 2009

SPECIFIC CONDITIONS:

Sulfate (mg/L)	Monthly
Field Temperature (°C)	Monthly
Total Kjeldahl Nitrogen (TKN) (mg/L)	Monthly
Sodium (mg/L)	Quarterly
Calcium (mg/L)	Quarterly
Potassium (mg/L)	Quarterly
Magnesium (mg/L)	Quarterly
Iron (mg/L)	Quarterly
Bicarbonate (mg/L)	Quarterly
Gross Alpha (pCi/L)*	Quarterly
Radium 226 (pCi/L)*	Quarterly
Radium 228 (pCi/L)*	Quarterly

^{*} Lower Zone Only

- * NOTE: Monitor well sampling frequency will increase to weekly/monthly when IW-2 begins operational testing as per specific condition 7.b.(2) in permit no. 280170-001-UC11
- e. The permittee shall submit to the Department the results of all monitoring data collected no later than the last day of the month immediately following the end of the month of record. The results shall be sent to the Department of Environmental Protection, South District Office, P.O. Box 2549, Fort Myers, Florida 33902-2549. Copies of the results shall also be sent to the Underground Injection Control Program, Bureau of Water Facilities Regulations, Department of Environmental Protection, 2600 Blair Stone Road, Mail Station #3530, Tallahassee, FL 32399-2400.
- In accordance with Rules 62-4.090(1) and 62-528.455(3)(a), F.A.C., the permittee shall submit an application for renewal of the existing operating permit (a minimum of 5 copies) with the applicable fee at least 60 days prior to the expiration of this operation permit. The application for renewal shall include the items listed in Rule 62-528.455(3)(b), F.A.C.

4. EMERGENCY DISPOSAL

- a. All applicable federal, state and local permits must be in place to allow for any alternate discharges due to emergency or planned outage conditions,
- b. Any changes in emergency disposal methods must be submitted for Technical Advisory Committee (TAC) review and Department approval.
- c. The permittee shall notify the local office of the Department within 24 hours in the event the emergency discharge has been used. The notification should include the reason for using the emergency discharge, the duration of the discharge, and the volume discharged. Written notification shall be provided within 5 days after its occurrence.

5. FINANCIAL RESPONSIBILITY

a. The permittee shall maintain separately the financial resources necessary to close, plug, and abandon the injection and associated monitor wells, at all times in accordance with Rule 62-528.435(9), F.A.C.

Mr. Jeff Pearson, Director of Utilities

Burnt Store WWTP

17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida

Permit/Cert No.: 44562-034-UO11

Date of Issue: January 20, 2009

Expiration Date: January 19, 2014

SPECIFIC CONDITIONS:

b. The permittee shall update annually the plugging and abandonment cost estimate. A certified (By Professional Geologist or Professional Engineer) copy of the annual update shall be submitted to the Department's Tallahassee UIC Program each year within 60 days after the anniversary date of issuance of this permit to the following addresses:

Underground Injection Control Program
Bureau of Water Facilities Regulation
Department of Environmental Protection
2600 Blair Stone Road, Mail Station #3530
Tallahassee, FL 32399-2400

Underground Injection Control Program
Department of Environmental Protection
South District Office
2295 Victoria Avenue, Ste 364
Ft Myers, FL 33902-2549

- c. Upon the occurrence of the annual plugging and abandonment cost estimate exceeding, by 10 percent or more, (Section b. previously), the cost estimate upon which the <u>current</u> financial responsibility is based; the permittee shall submit to the Department <u>certified</u> financial documentation necessary to amend, renew, or otherwise replace the existing financial responsibility pursuant to Rule 62-528,435(9), F.A.C. and the conditions of this permit. Local governments shall include an updated Certificate of Financial Responsibility form and the comprehensive annual financial report for the latest completed fiscal year of that local entity.
- d. In the event that the mechanism used to demonstrate financial responsibility should become insufficient or invalid for any reason, the permittee shall notify the Department of Environmental Protection in writing within 14 days of such insufficiency or invalidation. The permittee shall within 30 days of said notification submit to the Department for approval new financial documentation certifying either the remedy of current financial insufficiency or resolution of the financial instrument invalidation in order to comply with Rule 62-528.435(9), F.A.C., and the conditions of this permit.

6. MECHANICAL INTEGRITY

- a. The permittee shall maintain the mechanical integrity of the injection well at all times.
- b. If the Department determines that the injection well lacks mechanical integrity, written notice shall be given to the permittee.
- c. Unless the Department requires immediate cessation of injection, within 48 hours of receiving written notice that the well lacks mechanical integrity the permittee shall cease injection into the well unless the Department allows continued injection pursuant to d. below.
- d. The Department may allow the permittee to continue operation of a well that lacks mechanical integrity if the permittee has made a satisfactory demonstration that fluid movement into or between underground sources of drinking water is not occurring.
- 7. The permittee is reminded of the necessity to comply with the pertinent regulations of any other regulatory agency, as well as any county, municipal, and federal regulations applicable to the project. These regulations may include, but not limited to, those of the Federal Emergency Management Agency in implementing flood control measures. This permit should not be construed to imply compliance with the rules and regulations of other regulatory agencies.

Mr. Jeff Pearson, Director of Utilities Burnt Store WWTP 17430 Burnt Store Rd., Punta Gorda, Charlotte County, Florida Expiration Date: January 19, 2014

Permit/Cert No.: 44562-034-UO11 Date of Issue: January 20, 2009

SPECIFIC CONDITIONS:

8. The permittee shall be aware of and operate under the General Conditions of F.A.C. Rule 62-528.307(1)(a) through (x), and 62-528.307(3)(a) through (e). These General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403 of the Florida Statutes.

Note: In the event of an emergency the permittee shall contact the Department by calling (850) 488-1320. During normal business hours, the permittee shall call (239) 332-6975.

> Issued this day of

2009.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart

Director of

District Management

JMI/DR/MAP/mac



Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

SENT VIA ELECTRONIC MAIL:

In the Matter of an Application for Permit by:

January 15, 2008

Mr. Jeff Pearson, Director of Utilities Charlotte County Utilities 25550 Harborview Rd. Port Charlotte, Florida 33982 Email: jeff.pearson@charlottefl.com CharlotteCounty - UIC
File Number: 271367-001-UC1M
Burnt Store Class 1 Injection Well IW-2
Class 1 Injection Well

NOTICE OF PERMIT

Enclosed is Permit Number 271367-001-UC1M to operate a Class I Injection Well (IW-2) system, issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Lee County, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart

Director of District Management

CERTIFICATE OF SERVICE

The undersigned designated clerk hereby certifies that this PERMIT and all copies were mailed before the close of business on January 15, 2008 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

1.15.08

Clerk Date

JMI/DR/jgh

Enclosure

Cc Nancy Marsh, EPA (<u>marsh nancy@epa.gov</u>)
Steve Anderson, SFWMD (<u>sanderso@sfwmd.gov</u>)
Ron Reese, USGS (<u>rsreese@usgs.gov</u>)
Joe Haberfeld, FDEP (<u>joe.haberfeld@dep.state.fl.us</u>)
David McNabb, P.G. (<u>Dmcnabb@adelphia.net</u>)



Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

PERMIT

PERMITTEE:

Mr. Jeff Pearson, Director of Utilities Charlotte County Utilities 25550 Harborview Rd. Port Charlotte, Florida 33982 Email: jeff.pearson@charlottefl.com

Charlotte County - UIC
File Number: 271367-001-UC1M
Date of Issue: January 15, 2008
Expiration Date: January 14, 2013
Latitude: 26.0° 46.0' 15.00"N
Longitude: — 82.0° 02.0' 20.00"W
Burnt Store Class 1 Injection Well IW-2

Class 1 Injection Well

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-520, 62-528, 62-550, 62-600, 62-601, 62-620 and 62-660. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct one (1) nominal sixteen and six tenths-inch, (16.6"), inner diameter alternate design tubing Class I injection well (IW-2), with cemented twenty four-inch, (24"), steel casing to approximately 2500 feet below land surface (bls) and 16.6-inch ID FRP injection tubing cemented to approximately 2500 feet bls and a total depth of approximately 3000 feet bls. Injection will be into the Oldsmar Formation for the primary means of disposal of non-hazardous reverse osmosis concentrate from the Charlotte County Utilities Burnt Store WTP and non-hazardous secondary treated domestic wastewater from the Charlotte County Utilities Burnt Store WWTP for a maximum disposal of 9.71 million gallons per day (MGD) at a maximum injection rate of 6744 gpm per well. The existing dual zone monitoring well (DZMW-1) is completed from 1207 to 1287 feet bls and from 1832 to 1868 feet bls.

The Application to Construct/Operate/Abandon Class I, III, or V Injection well System, DEP Form 62-528.900(1), was received November 21, 2006, with supporting documents and additional information last received June 26, 2007. The Certificate of Demonstration of Financial Responsibility was approved August 3, 2007. The project is located at the Burnt Store WWTP at 17430 Burnt Store Rd., Punta Gorda, Florida, in the county of Charlotte, Florida.

Subject to Specific Conditions 1-14.

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

1. GENERAL CRITERIA

- a. Any permit noncompliance constitutes a violation of the Safe Drinking Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- c. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
- d. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures.
- e. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation or reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- f. When requested by the Department, the permittee shall furnish, within the time specified, any information needed to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- g. Signatories and Certification Requirements
 - (1) All reports and other submittals required to comply with this permit shall be signed by a person authorized under Rules 62-528.340(1) or (2), F.A.C.
 - (2) In accordance with Rule 62-528.340(4), F.A.C., all reports shall contain the following certification:
 - "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- h. The permittee shall notify the Department and obtain approval prior to any physical alterations or additions to the injection or monitor well, including removal of the well head.
- The permittee shall give advance notice to the Department of any planned changes in the permitted facility or injection activity that may result in noncompliance with permit requirements.

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

- j. The permittee shall report any noncompliance that may endanger health or the environment, including:
 - (1) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water; or
 - (2) Any noncompliance with a permit condition or malfunction of the injection system, which may cause fluid migration into or between underground sources of drinking water.
 - (3) Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- k. No underground injection is allowed that causes or allows movement of fluid into an underground source of drinking water.
- The permittee shall retain all records of all monitoring information concerning the nature and
 composition of injected fluid until five years after completion of any plugging and abandonment
 procedures specified under Rule 62-528.435, F.A.C. The permittee shall deliver the records to
 the Department office that issued the permit at the conclusion of the retention period unless the
 permittee elects to continue retention of the records.
- m. If injection is to continue beyond the expiration date of this permit the permittee shall apply for, and obtain an operation permit. If necessary to complete the two-year operational testing period, the permittee shall apply for renewal of the construction permit at least 60 days prior to the expiration date of this permit.

2. SITE REQUIREMENTS

- A drilling pad shall be provided to collect spillage of contaminants and to support the heaviest load that will be encountered during drilling.
- b. The disposal of drilling fluids, cuttings, formation water or waste shall be in a sound environmental manner that avoids violation of surface and ground water quality standards. The disposal method shall be approved by the Department prior to start of construction.
- c. Specific drilling pad dimensions and design details shall be provided to and approved by the Department prior to commencing construction (and shortly after selection of drilling contractor).
- d. The water table monitoring wells surrounding the injection well and monitor well pads shall be sampled and analyzed prior to drilling this injection well and then weekly thereafter. Sampling shall include specific conductance, pH, chloride, temperature and water level.

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

e. Pursuant to Rule 62-528.455(1)(c)6., F.A.C., a survey indicating the exact location in metes and bounds of all wells authorized by this permit shall be provided prior to issuance of an operating permit.

3. CONSTRUCTION AND TESTING REQUIREMENTS

- a. The permittee shall contact the Technical Advisory Committee (TAC) chairman so that he may schedule progress review meetings at appropriate times with the TAC and permittee for the purpose of reviewing the results of tests, geophysical logging, surveys, drilling records and construction problems.
- b. All drilling shall be inside a blow out preventer upon penetration of the Floridan Aquifer.
- c. Mechanical integrity testing is a two-part demonstration which includes a pressure test to demonstrate that no leaks are present in the casing, tubing or packer and a temperature or noise log and radioactive tracer survey to demonstrate the absence of leaks behind the casing. Verification of pressure gauge calibration must be provided at the scheduled tests.
- d. Department approval and Technical Advisory Committee (TAC) review pursuant to F.A.C. Rule
 62-528 is required for the following stages of construction:
 - (1) Intermediate casing seat selection for injection and monitor wells.
 - (2) Final casing seat selection for injection and monitor wells.
 - (3) Prior to conducting the short term injection test. A revised testing plan for the short-term injection test must be submitted and approved prior to running the test.
 - (4) Prior to operational (long term) testing with effluent.
 - (5) The permittee shall submit all necessary supporting documentation/data, with interpretation, to the TAC for review.
- e. The cementing program for the final injection well casing, as required in Section 62-528.410(5), Florida Administrative Code, shall be submitted to the Department and the Technical Advisory Committee for review. Cementing shall not commence prior to approval being granted.
- f. All temperature surveys (except for mechanical integrity demonstration) shall be run within 48 hours after cementing.
- g. TAC meetings are scheduled on the 1st Tuesday of each month subject to a 5 working day prior notice and timely receipt of critical data by all TAC members. Emergency meetings may be arranged when justified to avoid undue construction delay.
- h. The Permittee shall insure that safe internal pressures are maintained during the cementing of all casings and tubings.

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

- i. The injection zone and monitoring zones shall be sampled for background water quality prior to commencement of any injection testing. Parameters to be measured are the primary and secondary drinking water standards (except asbestos, dioxin, epichlorhydrin, and acrylamide) and the minimum criteria for municipal effluent.
- j. The injection and monitor well(s) at the site shall be abandoned when no longer usable for their intended purpose, or when posing potential threat to the quality of the waters of the State. Within 180 days of well abandonment, the permittee shall submit to the Department and the TAC the proposed plugging method, pursuant to Rule 62-528:435, F.A.C.
- k. All salt used in well drilling shall be stored in an environmentally sound manner. Accurate records shall be kept on the amount of salt used.
- l. All dual induction, sonic and caliper geophysical logs run on the pilot holes of the injection well and monitor wells shall be submitted with scales of one inch equals one hundred feet (1"=100"), two inches equals one hundred feet (2"=100"), and five inches equals one hundred feet (5"=100")
- m. An engineering drawing showing the drill pad construction (including material used) and locations of the injection well, dual zone monitor well, and the water table monitor wells shall be provided for Department approval prior to pad construction and well construction.

4. QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS

- a. This permit approval is based upon evaluation of the data contained in the application dated August 2005 and the plans and/or specifications submitted in support of the application. Any proposed modifications to this permit shall be submitted in writing to the Underground Injection Control program manager, the TAC for review and clearance prior to implementation. Changes of negligible impact to the environment and staff time will be reviewed by the program manager, cleared when appropriate and incorporated into this permit. Changes or modifications other than those described above will require submission of a completed application and appropriate processing fee as per Rule 62-4.050, F.A.C.
- b. A professional engineer registered pursuant to Chapter 471, Florida Statutes shall be retained throughout the construction period to be responsible for the construction operation and to certify the application, specifications, completion report and other related documents. The Department shall be notified immediately of any change of engineer.
- c. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) F.S., applicable portions of permit applications and supporting documents that are submitted to the Department for public record shall be signed and sealed by the professional(s) who approved or prepared them.
- d. The Department shall be notified immediately of any problems that may seriously hinder compliance with this permit, construction progress, or good construction practice. The Department may require a detailed written report describing the problem, remedial measures taken to assure compliance and measures taken to prevent recurrence of the problem.

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

e. Issuance of a Class I Test/Injection well construction and testing permit does not obligate the Department to authorize operation of the injection well system, unless the wells qualify for an operation permit applied for by the permittee and issued by the Department.

5. REPORTING REQUIREMENTS

a. All reports and surveys required by this permit must be submitted concurrently to all the members of the TAC. The TAC consists of representatives from the following agencies:

Florida Department of Environmental Protection South District P.O. Box 2549 Fort Myers, FL 33902-2549

Florida Department of Environmental Protection Bureau of Water Facilities Regulation UIC Program, MS 3530 2600 Blair Stone Rd. Tallahassee, FL 32399-2400

South Florida Water Management District P.O. Box 24860 West Palm Beach, FL 33416-4860

United States Geological Survey 9100 NW 36th Street, Suite 107 Miami, FL 33178

- b. Members of the TAC shall receive a weekly summary of the daily log kept by the contractor. The reporting period shall run for seven (7) days and reports shall be mailed or emailed within 48 hours of the last day of the reporting period. The report shall include but is not limited to the following:
 - (1) Description of daily footage drilled by diameter of bit or size of hole opener or reamer being used;
 - (2) Description of formation and depth encountered; and specific conductance of water samples collected during drilling. Description of work during installation and cementing of casings; include amounts of casing and actual cement used versus calculated volume required.
 - (3) Lithological description of drill cuttings collected every ten (10) feet or at every change in formation. Description of work and type of testing accomplished, geophysical logging, pumping tests, deviation survey results, and coring results.
 - (4) Description of any construction problems that develop and their status to include a description of what is being done or has been done to correct the problem.

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

- (5) Description of the amount of salt used.
- (6) Results of any water quality analyses performed as required by this permit, including pad monitor wells.
- (7) Copies of the driller's log are to be submitted with the weekly summary.
- c. The Department must be notified seventy-two (72) hours prior to all testing for mechanical integrity on the injection well. Testing should begin during daylight hours Monday through Friday.
- d. Annotated copies of geophysical logs, lithologic descriptions and logs and water quality data (from drilling and packer tests) must be submitted to TAC, with interpretation, for intermediate and final casing seat selection approvals by the Department.
- An interpretation of all test results must be submitted with all test data and geophysical logs.
- f. After completion of construction and testing, a final report, certified by a P.E. and P.G., shall be submitted to the Department and the TAC. The report shall include, but not be limited to, all information and data collected under Rule 62-528.450(2) and Rule 62-528.450(3), F.A.C., with appropriate interpretations. Mill certificates for the casing(s) shall be included in this report. To the extent possible, the transmissivity of the injection zone and maximum injection rate within safe pressure limits shall be estimated.
- 6. The construction permit includes a period of temporary injection operation for the purposes of long term testing. Prior to commencement of operational testing:
 - a. Construction of the injection well shall be complete and the permittee shall submit a notice of completion of construction certified by a P.E. to the Department.
 - b. Each well shall first be tested for integrity of construction, and shall be followed by a short-term injection test of such duration to allow for the prediction of the operating pressure.
 - c. The permittee shall submit the following information to each member of the Technical Advisory Committee:
 - (1) A copy of the borehole television survey(s)
 - (2) Geophysical logs
 - (3) Mechanical integrity test data
 - (4) Data obtained during the short term injection testing conducted pursuant to Rules 62-528.405(3)(a) and 62-528.410(7)(e), and 62-528.450(3)(a)2., F.A.C.
 - (5) Confining zone data
 - (6) Background water quality data for the injection and monitor zones

Permit/Cert No.: 271367-001-UCIM Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

- (7) Waste stream analysis
- (8) As-built well construction specifications
- (9) Draft operation and maintenance manual with emergency procedures
- (10) Other data obtained during well construction needed by the Department to evaluate whether the well will operate in compliance with Department rules.
- d. The emergency discharge method shall be fully operational and no emergency discharge shall occur until the permittee has obtained all necessary permits.
- e. Any corrective action required under Rule 62-528.300(5)(c)2., F.A.C., has been completed.
- f. Written authorization shall be obtained from the Department. Authorization shall be for up to two years or the expiration date of the construction permit, whichever is less, and is nonrenewable. The authorization shall specify the conditions under which operational testing is approved. The authorization shall include:
 - (1) Injection pressure limitation
 - (2) Injection flow rate limitation
 - (3) Monthly specific injectivity testing
 - (4) Reporting requirements, and
 - (5) An expiration date for the operational testing period not to exceed two years.
- g. Before authorizing operational testing the Department shall conduct an inspection of the facility to determine if the conditions of the permit have been met.

7. OPERATIONAL TESTING REQUIREMENTS

- a. Operational Testing Conditions Injection Well System
 - (1) The injection system shall be monitored in accordance with rule 62-528.425(1)(g) and 62-528.430(2), F.A.C.
 - (2) The following injection well performance data shall be recorded and reported at the frequency indicated from the injection well instrumentation in the Monthly Operating Report as indicated below. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

The permittee shall use continuous indicating and recording devices to monitor injection flow rate, annular pressure, and injection pressure. In the case of operational failure of any of these instruments for a period of more than 48 hours, the permittee shall report to the Department in writing the remedial action to be taken and the date when the failure will be corrected.

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SPECIFIC CONDITIONS:

INJECTION WELL IW-2. The proposed specifications for the injection well are as follows:

Casing Diameter and Type	Depth (bls) Cased	Open:Höle:(bls)
52" Steel	200	
42" Steel	750	
34" Steel	1350	
18" O.D. FRP	2445	
		from 2500 to 3000

Parameters:	Reporting Frequency
Injection Pressure (psi)	Daily/Monthly
Maximum Injection Pressure	Daily/Monthly
Minimum Injection Pressure	Daily/Monthly
Average Injection Pressure	Daily/Monthly
	Control of the second s
Annular Pressure (psi)	Daily/Monthly
Maximum Annular Pressure	Daily/Monthly
Minimum Annular Pressure	Daily/Monthly
Average Annular Pressure	Daily/Monthly
Control of the Contro	
Fluid added to/removed from Annulus (gallons)	Daily/Monthly
Pressure added to/removed from Annulus (psi)	Daily/Monthly
Flow Rate (gpm)	Daily/Monthly
Maximum Flow Rate	Daily/Monthly
Minimum Flow Rate	Daily/Monthly
Average Flow Rate	Daily/Monthly
Total Volume WRF Effluent Injected (gallons)	Daily/Monthly
Total Volume WTP Concentrate Injected (gallons)	Daily/Monthly

Injectate Water Quality

WRF Effluent Water Quality

Ranameters	Reporting Frequency
Ammonia (mg/l)	Monthly
Total Kjeldahl Nitrogen (TKN) (mg/L)	Monthly
Nitrate + Nitrite as N (mg/l)	Monthly

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SPECIFIC CONDITIONS:

WTP Concentrate Water Quality

Parameters	Reporting Frequency
Specific Conductivity (µmhos/cm)	Monthly
Total Dissolved Solids (mg/L)	Monthly
pH (std. units)	Monthly
Chloride (mg/L)	Monthly
Sulfate (mg/L)	Monthly
Field Temperature (°C)	Monthly
Total Kjeldahl Nitrogen (TKN) (mg/L)	Monthly
Sodium (mg/L)	Monthly
Calcium (mg/L)	Monthly
Potassium (mg/L)	Monthly
Magnesium (mg/L)	Monthly
Iron (mg/L)	Monthly
Bicarbonate (mg/L)	Monthly
Radium 226 (pCi/L)	Monthly
Radium 228 (pCi/L)	Monthly
Gross Alpha (pCi/L)	Monthly

- b. Operational Testing Conditions Monitor Well System.
 - (1) The monitor well system will consist of one Dual Zone Monitor Well, (DZMW-1) as described below:

Well Name	Casing Diameter and Type	Depili Cased (bls)/Total (bls)
DZMW-1 (Upper)	18" Steel	551
	9.625" Steel	1207
Upper Zone Monitoring Interval		from 1207 to 1287
DZMW-1 (Lower)	4.5" Steel	
Lower Zone Monitoring Interval		from 1832 to 1868

(2) All monitor wells shall be monitored in accordance with rule 62-528.425 and 62-528.430, F.A.C. The following monitor well performance data shall be recorded and reported at the frequency indicated from the monitor well instrumentation in the Monthly Operating Report as indicated below. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The permittee shall use continuous indicating and recording devices to monitor the monitor zone pressures or water levels. In the case of operational failure of any of these instruments for a period of more than 48 hours, the permittee shall report to the Department in writing the remedial action to be taken and the date when the failure will be corrected.

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SPECIFIC CONDITIONS:

DZMW-1

Parameters	Reporting/Erequency
Maximum Water Level/Pressure (Ft NAVD or psi)	Daily/Monthly
Minimum Water Level/Pressure (Ft NAVD or psi)	Daily/Monthly
Average Water Level/Pressure	Monthly

Water Quality

Parameters:	Reporting Frequency.
Specific Conductivity (µmhos/cm)	Weekly
Total Dissolved Solids (mg/L)	Weekly
pH (std. units)	Weekly
Chloride (mg/L)	Weekly
Sulfate (mg/L)	Weekly.
Field Temperature (°C)	Weekly
Ammonia (mg/l)	Weekly
Total Kjeldahl Nitrogen (TKN) (mg/L)	Weekly
Sodium (mg/L)	Monthly
Calcium (mg/L)	Monthly
Potassium (mg/L)	Monthly
Magnesium (mg/L)	Monthly
Iron (mg/L)	Monthly
Bicarbonate (mg/L)	Monthly
Gross Alpha (pCi/L) **	Monthly
Radium 226 (pCi/L) **	Monthly
Radium 228 (pCi/L) **	Monthly

^{**} Deep zone monitor well only.

- (3) Water quality data may be reduced to monthly analyses after a minimum six months of data if the conditions of Rule 62-528.450(3)(d), F.A.C., have been met and with Department approval.
- c. The permittee shall calibrate all pressure gauge(s), flow meter(s), chart recorder(s), and other related equipment associated with the injection well system on a semi-annual basis. The permittee shall maintain all monitoring equipment and shall ensure that the monitoring equipment is calibrated and in proper operating condition at all times. Laboratory equipment, methods, and quality control will follow EPA guidelines as expressed in Standard Methods for the Examination of Water and Wastewater. The pressure gauge(s), flow meter(s), and chart recorder(s) shall be calibrated using standard engineering methods.
- d. The permittee shall submit monthly to the Department the results of all injection well and monitor well data required by this permit no later than the last day of the month immediately following the month of record. The results shall be sent to the Department of Environmental Protection, P.O. Box 2549, Fort Myers, Florida 33902-2549. A copy of this report shall also be sent to the

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

Department of Environmental Protection, Underground Injection Control Program, MS 3530, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

e. The Engineer of Record or designated qualified representative must be present for the start-up operations and the Department must be notified in writing of the date operational testing commenced for the well.

8. ABNORMAL EVENTS

- a. In the event the permittee is temporarily unable to comply with any conditions of this permit due to breakdown of equipment, power outages, destruction by hazard of fire, wind, or by other cause, the permittee shall notify the Department. Notification shall be made in person, by telephone or by electronic mail within 24 hours of breakdown or malfunction to the UIC Program staff, South District office.
- b. A written report of any noncompliance referenced in 1) above shall be submitted to the South District office within five days after its occurrence. The report shall describe the nature and cause of the breakdown or malfunction, the steps being taken or planned to be taken to correct the problem and prevent its reoccurrence, emergency procedures in use pending correction of the problem, and the time when the facility will again be operating in accordance with permit conditions.

9. EMERGENCY DISPOSAL

- a. All applicable federal, state and local permits must be in place to allow for any alternate discharges due to emergency or planned outage conditions.
- b. Any changes in emergency disposal methods must be submitted for Technical Advisory Committee (TAC) review and Department approval.
- c. The permittee shall notify the Department within 24 hours whenever an emergency discharge has occurred (Rule 62-528.415(4)(c)1., F.A.C.). Written notification shall be provided to the Department within 5 days after each occurrence. The Permittee shall indicate the location and duration of the discharge and the volume of fluid discharged.

10. FINANCIAL RESPONSIBILITY

- a. The permittee shall maintain separately the financial resources necessary to close, plug, and abandon the injection and associated monitor wells, at all times in accordance with Rule 62-528.435(9), F.A.C.
- b. The permittee shall update annually the plugging and abandonment cost estimate. A certified (By Professional Geologist or Professional Engineer) copy of the annual update shall be submitted to the Department's UIC Program each year within 60 days after the anniversary date of issuance of this permit to the following addresses:

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

Underground Injection Control Program Bureau of Water Facilities Regulation Department of Environmental Protection 2600 Blair Stone Road, Mail Station #3530 Tallahassee, FL 32399-2400 Underground Injection Control Program Department of Environmental Protection South District Office 2295 Victoria Avenue, Ste 364 Ft Myers, FL 33902-2549

- c. Upon the occurrence of the annual plugging and abandonment cost estimate exceeding, by 10 percent or more, (Section b. previously), the cost estimate upon which the <u>current</u> financial responsibility is based; the permittee shall submit to the Department <u>certified</u> financial documentation necessary to amend, renew, or otherwise replace the existing financial responsibility pursuant to Rule 62-528.435(9), F.A.C. and the conditions of this permit. Local governments shall include an updated *Certificate of Financial Responsibility* form and the comprehensive annual financial report for the latest completed fiscal year of that local entity.
- d. In the event that the mechanism used to demonstrate financial responsibility should become insufficient or invalid for any reason, the permittee shall notify the Department of Environmental Protection in writing within 14 days of such insufficiency or invalidation. The permittee shall within 30 days of said notification submit to the Department for approval new financial documentation certifying either the remedy of current financial insufficiency or resolution of the financial instrument invalidation in order to comply with Rule 62-528.435(9), F.A.C., and the conditions of this permit.

11. MECHANICAL INTEGRITY

- a. Injection is prohibited until the permittee affirmatively demonstrates that the well has mechanical integrity. Prior to operational testing the permittee shall establish, and thereafter maintain, mechanical integrity of the well at all times.
- b. If the Department determines that the injection well lacks mechanical integrity, written notice shall be given to the permittee.
- c. Unless the Department requires the immediate cessation of injection, within 48 hours of receiving written notice from the department that the well lacks mechanical integrity the permittee shall cease injection into the well unless the Department allows continued injection pursuant to (d) below.
- d. The Department may allow the permittee to continue operation of a well that lacks mechanical integrity if the permittee demonstrates that fluid movement into or between underground sources of drinking water is not occurring.

12. ALTERNATIVE DESIGN APPROVAL

a. The permittee is reminded of the necessity to comply with the perfinent regulations of any other regulatory agency, as well as any county, municipal, and federal regulations applicable to the project. These regulations may include, but not limited to, those of the Federal Emergency Management Agency in implementing flood control measures. This permit should not be construed to imply compliance with the rules and regulations of other regulatory agencies.

Permit/Cert No.: 271367-001-UC1M Date of Issue: January 15, 2008 Expiration Date: January 14, 2013

SPECIFIC CONDITIONS:

- 13. The permittee is reminded of the necessity to comply with the pertinent regulations of any other regulatory agency, as well as any county, municipal, and federal regulations applicable to the project. These regulations may include, but not limited to, those of the Federal Emergency Management Agency in implementing flood control measures. This permit should not be construed to imply compliance with the rules and regulations of other regulatory agencies.
- 14. The permittee shall be aware of and operate under the general conditions in Rule 62-528,307(1)(a) through (x) and Rule 62-528,307(2)(a) through (f), F.A.C. These general conditions are binding upon the permittee and enforceable pursuant to Chaper 403 of the Florida Statutes.

Note: In the event of an emergency the permittee shall contact the Department by calling (850) 488-1320. During normal business hours, the permittee shall call (239) 332-6975.

Issued this 15 day of January 2008.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart

Director of District Management

JMI/DR/jgh



Charlie Crist Governor

Jeff Kottkömp Lt. Governor

Michael W. Sole Secretary

BY ELECTRONIC MAIL:

March 4, 2008

In the Matter of an Application for Permit by:

Mr. Jeff Pearson, Director of Utilities Charlotte County Utilities. 25550 Harborview Rd. Port Charlotte, Florida 33982 Email: jeff.pearson@charlottefl.com CharlotteCounty - UIC
File Number: 271367-001-UC1MM
Burnt Store Class 1 Injection Well IW-2
Class 1 Injection Well Minor Modification
Permit Application

Enclosed is Permit Modification Number 271367-001-UCIMM to modify one Class I Injection Well, issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart Director of

District Management

CERTIFICATE OF SERVICE

The undersigned designated clerk hereby certifies that this MINOR MODIFICATION and all copies were mailed before the close of business on March 4, 2008 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Julia S. La Ma	3/4/08
Clerk	 Date

JMI/DR/pr

Enclosure

CC:

Nancy Marsh, (marsh.nancy@epa.gov)
Eric Eshom, P.G., (eric.eshom@swfwmd.state.fl.us)
Dann K. Yobbi, (dvobbi@usgs.gov)
Joe Haberfeld, (joe.haberfeld@dep.state.fl.us)
Vincent LiCausi, (Vincent_LiCausi@charlottefl.com)
David McNabb, P.G. (Dmcnabb@adelphia.net)
Rick Cowles, P.G. (rcowles@pirnie.com)



Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

PERMIT MODIFICATION

BY ELECTRONIC MAIL:

Mr. Jeff Pearson, Director of Utilities Charlotte County Utilities. 25550 Harborview Rd. Port Charlotte, Florida 33982 Email: jeff.pearson@charlottefl.com CharlotteCounty - UIC
File Number: 271367-001-UC1MM
Burnt Store Class 1 Injection Well IW-2
Class 1 Injection Well Minor Modification
Permit Application

Dear Mr. Pearson:

The Department staff has reviewed the subject request received on February 27, 2008 and additional information received on February 29, 2008 and on March 4, 2008 and hereby approves the request to change the well casing specifications as shown:

FROM:

Casing Diameter and Type	Depth (bis); Cased	Open/Hole:(bls)
60" Steel	40	
52" Steel	200	
42" Steel	750	1,500
34" Steel	1350	
18" O.D. FRP	2445	
		from 2500 to 3000

TO:

Casing Diameter and Type	Depth (bls) Cased	Open Höle (bis)
62" Steel	8	
54" Steel	200	
44" Steel	750	
34" Steel	1350	
18" O.D. FRP	2445	
		from 2500 to 3000



Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

BY ELECTRONIC MAIL:

May 8, 2008

In the Matter of an Application for Permit by:

Mr. Jeff Pearson,, Director of Utilities Charlotte County Utilities. 25550 Harborview Rd. Port Charlotte, Florida 33982 Email: jeff.pearson@charlottefl.com CharlotteCounty - UIC
File Number: 271367-003-UC1MM
Burnt Store Class 1 Injection Well IW-2
Class 1 Injection Well Minor Modification
Permit Application

Enclosed is Permit Modification Number 271367-003-UC1MM to modify the location of one Class I Injection Well, issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart Director of

District Management

CERTIFICATE OF SERVICE

The undersigned designated clerk hereby certifies that this MINOR MODIFICATION and all copies were mailed before the close of business on May 8, 2008 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Mica Alolenan 5-8-08

Clerk Date

JMI/DR/mac

Enclosure

CC:

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BY ELECTRONIC MAIL:

July 20, 2009

Ms. Terri Kesner, P.E., Acting Utilities Director Charlotte County Utilities 25550 Harborview Road Port Charlotte, FL 33982 Terri.Kesner@charlottefl.com Charlotte County - UIC/DW
FDEP File No. 271367-001 UC/1M
Burnt Store Water Reclamation Facility
Class I Injection Well IW-2
Authorization to Commence
Operational Testing

Dear Ms. Kesner:

The Department has received and hereby approves the request by Charlotte County Utilities to begin operational testing of injection well IW-2 for the Charlotte County Utilities Burnt Store Water Reclamation Facility. The Burnt Store WRF may commence operational testing in accordance with Specific Condition 7 of construction permit 271367-001-UC/1M and the specific testing and reporting conditions listed below:

Operational Testing Conditions

1

- a. The Engineer of Record or designated qualified representative must be present for the start-up operations and the Department must be notified in writing of the date operational testing commenced for the well.
- b. Only disposal of non-hazardous secondary treated domestic effluent from Burnt Store WRF, and non-hazardous reverse osmosis concentrate from the Burnt Store Reverse Osmosis Water Treatment Plant (ROWTP) may be injected.
- Continuous recording of water levels in monitor well DZMW-1 shall begin at least 48
 hours prior to the start of operational testing
- d. Flow to the injection well shall be monitored at all times to ensure the maximum sustained pressure at the wellhead does not exceed 103psi on the final casing and a maximum injection rate of 2000 gpm, or 2.88 MGD.
- e. The Permittee shall calibrate all pressure gauge(s), flow meter(s), chart recorder(s), and other related equipment associated with the injection well system on a semiannual basis. The Permittee shall maintain all monitoring equipment and shall ensure that the monitoring equipment is calibrated and in proper operating condition at all times. Laboratory equipment, methods, and quality control will follow EPA guidelines as

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expressed in standard methods for the examination of water and wastewater. The pressure gauge(s), flow meter(s), and chart recorder(s) shall be calibrated using standard engineering methods.

f. INJECTION WELL IW-2 The specifications for the injection well are as follows:

Casing Diameter (OD)	Depth (bls)Cased	Open Hole (bls)
54" Steel	220′	
44" Steel	710′	
34" Steel	1,382′	
24" Steel	2, 503	
16.6"ID FRP Tubing	2,492′	2,503′ – 3,003 ′

The injection well shall be monitored in accordance with the parameters and frequency listed below. The Permittee shall submit a Summary of the Monthly Monitoring Data developed from the injection well instrumentation. Injection pressure and injection flow rate shall be monitored continuously and reported at the frequency indicated below. The report shall include the following data:

	The state of the s
Parameters	Reporting Frequency
Injection Pressure (psi)	Daily/Monthly
Maximum Injection Pressure	Daily/Monthly
Minimum Injection Pressure	Daily/Monthly
Average Injection Pressure	Daily/Monthly
	加上的过去分词形式运动的现在分词等地
Flow Rate (gpm)	Daily/Monthly
Maximum Flow Rate	Daily/Monthly
Minimum Flow Rate	Daily/Monthly
Average Flow Rate	Daily/Monthly
Total Volume WRF Effluent Injected (gallons)	Daily/Monthly
Total Volume WTP Concentrate Injected (gallons)	Daily/Monthly

Injectate Water Quality

WRF Effluent Water Quality

Parameters	Reporting Frequency
Ammonia (mg/1)	Monthly
Total Kjeldahl Nitrogen (TKN) (mg/L)	Monthly
Nitrate + Nitrite as N (mg/l)	Monthly

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WTP Concentrate Water Quality

Parameters	Reporting Frequency
Specific Conductivity (µmhos/cm)	Monthly
Total Dissolved Solids (mg/L)	Monthly -
pH (std. units)	Monthly
Chloride (mg/L)	Monthly
Sulfate (mg/L)	Monthly
Field Temperature (°C)	Monthly
Total Kjeldahl Nitrogen (TKN) (mg/L)	Monthly
Sodium (mg/L)	Monthly
Calcium (mg/L)	Monthly
Potassium (mg/L)	Monthly
Magnesium (mg/L)	Monthly
Iron (mg/L)	Monthly
Bicarbonate (mg/L)	Monthly
Radium 226 (pCi/L)	Monthly
Radium 228 (pCi/L)	Monthly
Gross Alpha (pCi/L)	Monthly

Monitor Well System DZMW-1

The monitor well system will consist of one Dual Zone Monitor Well, (DZMW-1) as described below:

Ballin in Mett Name : 11 1 1 1 1 C	asing Diameter and Type	Depth Cased (bls)/Fotal (bls)
DZMW-1 (Upper)	18" Steel	5 51
	9.625" Steel	1207
Upper Zone Monitoring Interval		from 1207 to 1287
DZMW-1 (Lower)	4.5" Steel	
Lower Zone Monitoring Interval		from 1832 to 1868

All monitor wells shall be monitored in accordance with rule 62-528.425 and 62-528.430, F.A.C. The following monitor well performance data shall be recorded and reported at the frequency indicated from the monitor well instrumentation in the Monthly Operating Report as indicated below. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The permittee shall use continuous indicating and recording devices to monitor the monitor zone pressures or water levels. In the case of operational failure of any of these instruments for a period of more than 48 hours, the permittee shall report to the Department in writing the remedial action to be taken and the date when the failure will be corrected.

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DZMW-1

Parameters	Reporting Frequency
Maximum Water Level/Pressure (Ft NAVD or psi)	Daily/Monthly
Minimum Water Level/Pressure (Ft NAVD or psi)	Daily/Monthly
Average Water Level/Pressure	Monthly

Water Quality

Parameters	Reporting Frequency
Specific Conductivity (µmhos/cm)	Weekly
Total Dissolved Solids (mg/L)	Weekly
pH (std. units)	Weekly
Chloride (mg/L)	Weekly
Sulfate (mg/L)	Weekly
Field Temperature (°C)	Weekly
Ammonia (mg/l)	Weekly
Total Kjeldahl Nitrogen (TKN) (mg/L)	Weekly
Sodium (mg/L)	Monthly
Calcium (mg/L)	Monthly
Potassium (mg/L)	Monthly
Magnesium (mg/L)	Monthly
Iron (mg/L)	Monthly
Bicarbonate (mg/L)	Monthly
Gross Alpha (pCi/L) **	Monthly
Radium/226 (pCi/L) **	Monthly
Radium 228 (pCi/L) **	Monthly

^{**} Deep zone monitor well only.

Water quality data may be reduced to monthly analyses after a minimum six months of data if the conditions of Rule 62-528.450(3)(d), F.A.C., have been met and with Department approval.

- g. A specific injectivity test shall be performed monthly on the injection well, (IW-1), as required by Rule 62-528.430(2)(b)1.b., F.A.C. Pursuant to Rule 62-528.430(2)(d), F.A.C., the specific injectivity test shall be performed with the pumping rate to the well set at a predetermined level and reported as the specific injectivity index (gallons per minute/specific pressure). The pumping rate to be used shall be based on the expected flow, the design of the pump types, and the type of pump control used. After this test, the well shall be shut-in for a period of time necessary to conduct a valid observation of pressure fall-off. The specific injectivity test and pressure fall-off data shall be submitted along with the monitoring results of the injection and monitoring well data.
- h. The Permittee shall submit monthly to the Department the results of all injection well and monitor well data required by this permit no later than the last day of the month immediately following the month of record. The results shall be sent to the Department of Environmental Protection, P.O. Box 2549, Fort Myers, Florida, 33902-2549. A copy of

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this report shall also be sent to the Department of Environmental Protection, Underground Injection Control Program, MS 3530, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

i. Operational testing of this injection well system shall cease upon expiration of this permit, unless the Department has issued an intent to issue an operation permit, or a timely renewal application (Rule 6204.090.F.A.C.) for this construction permit has been submitted to the Department. However, under no circumstances shall the duration of the operational testing period exceed two years as specified in Rule 62-528.450(3)(e), F.A.C.

Note: In the event of an emergency the permittee shall contact the Department by calling (850) 488-1320. During normal business hours, the permittee shall call (239) 332-6975.

This letter must be attached to your permit and becomes a part of that permit.

Sincerely,

Jon M. Iglehart Director of

District Management

JMI/DR/mac Copies furnished to:

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ACRONYMS

Annual Average Daily Flow
Average Daily Flow
Biochemical Oxygen Demand
Carbonaceous Biochemical Oxygen Demand
cubic feet per minute
Department of Environmental Protection
Dissolved Oxygen
Engineering Report
Florida Department of Environmental Protection
Food to Microorganism
feet
gallons per day
gallons per hour
gallons per minute
Horsepower
inch
Liter
Monthly Average Daily Flow
Mean Cell Residence Time
million gallons per day
Milligram per Liter
milliliter
Mixed Liquor Suspended Solid
Mixed Liquor Volatile Suspended Solid

Not Applicable	
Number	
Nephelometric Turbidity Unit	
Outer Diameter	
Private Company	
Peaking Factor	
Process Flow Diagram	
Peak Hour Flow	
pounds per square inch	
Return Activated Sludge	
Solids Retention Time	
Standard Unit	
Technical Memorandum	
Three Month Average Daily Flow	
Total Suspended Solids	
Waste Activated Sludge	
Water Reclamation Facility	