

TO: James L. App, City Manager
FROM: Doug Monn, Public Works Director
SUBJECT: Request for Use of a Private Water Well, Ayres Hotel
DATE: March 6, 2012

NEEDS: That the City Council consider a request by Ayres Hotels for the development and use of a private well located at the northeast corner of Buena Vista Drive and Experimental Station Road.

FACTS:

1. The City has received an application for the development of a hotel, resort and spa on 20 acres of property located at the northeast corner of Buena Vista Drive and Experimental Station Road by the Ayres Hotel Company of Costa Mesa.
2. Included in the application is a request to drill and operate a well to irrigate approximately 10 acres of vineyards and olive orchards planted as an amenity to the resort.
3. Groundwater in this area is in a chronic state of decline.
4. The City supplies potable water to the citizens of Paso Robles. In order to accomplish this, it operates 17 water wells taking water from the Paso Robles groundwater basin and Salinas River underflow.
5. In order to maintain a stable supply of water, the City must protect its resources. Section 14.06 of the Municipal Code currently limits well permits to agricultural uses only.
6. In July, 2011, the City Council adopted their latest Urban Water Management Plan (UWMP). The UWMP establishes policy to serve new development with surface and recycled water sources. The objective of the policy is to ensure new development does not negatively impact water supply reliability for existing customers and prevent further depletion of groundwater resources.
7. City water is available to the subject property from a 12-inch main in Buena Vista Drive. The City operates a well directly abutting the northwest corner of the subject property.
8. Over the past decade, Council considered four requests for private wells for resort/recreational facilities (see Exhibit B).

ANALYSIS &

CONCLUSION: There have been four previous requests for use of wells associated with resorts. Two of those were associated with golf courses. The other applications were the Wine Country RV Park, where City water was readily available and well use was denied for landscaping; and the Vina Robles winery on Mill Road, where well use was approved for a demonstration vineyard associated with a winery-hospitality center that has since been developed and operates today.

There are, however, some very significant differences between the Vina Robles application and the Ayres proposal.

- The Ayres project is much closer to the core of the community and the City's wells. Vina Robles lies two miles to the east.
- There is no existing well or history of operation of a well on the Ayres property.
- Problems associated with the continuing decline of the groundwater basin are at a greater level now than in 2004, when the Vina Robles project was approved. Expanding groundwater pumping in this area will negatively impact the groundwater basin.
- Last year, the City established policy, with adoption of the 2010 Urban Water Management Plan, to supply all new development with surface and recycle water supplies.

In their project description the applicant suggests "the use of treated, chlorinated domestic water is inconsistent with the goal of providing as pure of an agricultural product as possible." There is no evidence to support this suggestion. On the contrary, attached is a study prepared by horticulturists at the University of Georgia advising the use of chlorine to control bacteria and algae which can clog drip irrigation systems.

The Municipal Code establishes that the City is the water supplier within its jurisdiction. With adoption of the 2010 Urban Water Management Plan, the City established policy to serve new development with surface and recycled water sources. Requiring the use of City water for all new development supports the long-term sustainability of our groundwater resources and was the foundation of the water rate setting process. Furthermore, the City has a responsibility to provide water meeting drinking water regulations and the operation of private wells can impair doing so. Connection to the City water system (potable and future recycled water) for all water uses at the site is needed to provide sound stewardship of resources, to support adopted City

policies and programs, and to avoid cross-contamination between City potable supplies and private supplies.

POLICY

REFERENCE: 2010 Urban Water Management Plan

FISCAL

IMPACT: None

- OPTIONS:
- a. Adopt Resolution 12-xxx to deny a request by Ayres Hotels for use of a well to irrigate a vineyard and orchard associated with a resort development at the northeast corner of Buena Vista Drive and Experimental Station Road.
 - b. Amend, modify or reject the above option.

Prepared by: John Falkenstien, City Engineer

ATTACHMENTS:

- 1. Well Request from Ayres Hotels Project Description
- 2. Requests for Use of Private Wells for Resorts and Golf Courses
- 3. Article from the University of Georgia
- 4. Resolution



AYRES HOTELS

Ayres Resort & Spa - Paso Robles

Introduction and Background

The Ayres family name is well known in Southern California for a long history of home building, commercial, and hotel development and management. The family tradition began in 1905 when Frank Ayres with his wife and young son Donald moved to California from Ohio. He gained a reputation as a quality home builder throughout Southern California. In the 1920's Southern California was roaring with the rise of Hollywood. The demand for quality homes was great and Frank's son Don joined with his father to meet the demand. In the post war 1950's Don Sr.'s son, Don Jr., joined the family business establishing the third generation in business together. In 1980 Don Jr. developed the concept of a boutique style hotel after a trip to Europe. The family opened their first hotel in 1984. The Ayres family now owns and manages 20 hotels under the Ayres brand.

All of Ayres Hotels are widely recognized for their value, quality and comfortable atmospheres. The unique ambience and luxury draws guests to this growing family of hotels. From European boutique elegance to local touches, each has a personality and charm that is distinctly Ayres. Inviting lobbies adorned with beautiful fireplaces, meticulously selected antiques and classic art works are just a few of the special touches that can be found at the Ayres Hotels.

Project Description

Ayres Resort & Spa – Paso Robles will be a self contained destination resort combining a quality hotel, spa, wellness center, restaurant, wine tasting, conference facilities, specialty commercial and extended stay accommodations to provide high quality and complimentary amenities to visitors to Paso Robles as well as local residents. The Ayres Resort & Spa - Paso Robles is being crafted to reflect the pastoral nature and history of Paso Robles in a quiet rural agricultural environment surrounded by vineyards, olive groves and naturalist landscaping with buildings that will grace the natural landforms. The project philosophy is one of health and sustainability in design and construction, as well as in operations.

Hotel – The Ayres hotel will be two stories in Tuscan style with a spacious courtyard. The location of the hotel building on the property is based on the vertical and horizontal characteristics of the existing landforms. One might note that the hotel building is not parallel to the property lines as a more typical approach might take, but is rotated to harmonize with the shape and energy characteristics of the land. The land will gently rise to the hotel and the existing knoll behind the hotel will be preserved and planted with vineyards and olive orchards allowing the building to blend pleasingly with the terrain.

The first phase will include 129 guest rooms and suites. Complimenting the guest rooms, the Ayres Resort will offer a fine dining restaurant with a bar and lounge, and a spa with private treatment rooms. Both the restaurant and the spa will also be available to local residents. The first phase will provide approximately 5,000 sf of conference and meeting facilities in the interior of the hotel and opportunities for less formal meeting and gathering areas in the courtyard and gardens. The hotel will be furnished with authentic European furnishings consistent with the style of Ayres Hotels. The grounds will include a pool, spa, bocce ball courts, vineyards, olive orchards, and a variety of classic meditation gardens.

Extended Stay Accommodations - Comprised of five two-story buildings housing thirty-six private units, the extended stay accommodations will include spacious living and sleeping areas, and kitchens. The extended stay accommodations will provide opportunities to address a clear demand for visitors to our area that desire an extended stay in an environment more like a home or apartment making the experience of doing business in Paso Robles more relaxing and comfortable.

Landscape and Agriculture – The gardens will be one of the highlights of the Ayres Resort & Spa – Paso Robles. The first resort of its type in Paso Robles, the hotel will be nestled within vineyards and orchards. This privacy provides clients and guests an experience unique to Paso Robles wine country. In addition to vineyards and an olive orchard, a variety of herb, flower and vegetable gardens will abound. Meditation gardens will be featured, consistent with the tranquility found in the rest of the project. The visitor's experience will be immersion in a California native and Mediterranean landscape reflecting the ecology of Paso Robles and Tuscan agrarian styles.

Agricultural Operations – Due to the size of the parcel and the limited needs of the actual development footprint, there are approximately 10 acres of land that will be utilized for agricultural purposes. The acreage of the vineyards and the olive orchards make the potential for agricultural production realistic. The vineyards will be planted with varieties that have a low water demand and maintained in a manner harmonious with the resort. A request for an agricultural well is part of the agricultural production plan as the use of treated, chlorinated domestic water is inconsistent with the goal of providing as pure of an agricultural product as possible.

Wine Tasting and Visitor Commercial – A wine tasting and retail boutique is planned for a future phase of the project. The approximate size of the space required is 5,000 sf. This adds another dimension to visitor benefits and serves the character of the project by allowing people visiting the hotel and others visiting the area to enjoy the wine tasting experience and shopping opportunities for local crafts and products as well as wine, and olive oil products grown on the property.

Wellness Center - In a future phase, a wellness center of approximately 5,000 sf will be developed which features holistic and energetic therapy. This feature will appeal not only to guests of the hotel, but provides quality services to other visitors and residents of the area.

Project Design Approach

The design of Ayres Resort and Spa-Paso Robles is a collaborative effort of local engineers, architects and landscape architects working closely with Doug Ayres. North Coast Engineering combined forces with Landscape Architect David Foote of Firma and Architect Steve Puglisi to bring the vision of the Ayres family into focus for a quality experience for visitors to Paso Robles as well as locals.

The following principles were incorporated into the preliminary design:

- Develop a resort community sensitive to the existing landforms.
- Provide a mixture of accommodations, culinary opportunities, wellness and health opportunities, and conference facilities in a rural setting.
- Implementation of environmental responsibility using low impact development techniques such as energy efficiency, water use reduction, sustainable materials and other means where possible. This project will pursue the SLO Green Build Certificate of Recognition.
- Surround the resort and supporting buildings with vineyards and olive groves to accent the Paso Robles agricultural and viticultural themes and promote the Purple Belt Program. As part of the vineyard development, Ayers will coordinate with the Central Coast Vineyard Team to incorporate sustainable practices in the vineyard operations.
- Work with Cuesta College to provide both viticultural and hospitality educational opportunities

Low Impact Design

Low Impact Design (LID) principles and practices have been incorporated into the planning and design of the project. The primary goals of LID are to maintain the existing hydrologic function of the site and the water quality of runoff leaving the site by reducing impervious surfaces, preserving existing vegetation, promoting ground water recharge and employing bioretention. The LID measures for the project were designed using the interim design criteria from the *Low Impact Development (LID) for Storm Water Control: Interim Design Guidance for New and Redevelopment Projects*, which were developed by a joint effort sponsored by Region 3 municipalities, including the City of Paso Robles, and the Central Coast Regional Water Quality Control Board (RWQCB). The primary design criterion of the interim guidelines is to retain and infiltrate runoff from the 85th percentile storm.

The primary LID features employed on the project are as follows:

- Bioretention swales and rain gardens are employed throughout the site, particularly in the parking lot medians. These vegetated areas retain approximately 6" of runoff before discharging to the storm drain system; they improve water quality and reduce runoff through bioretention and infiltration. The parking lots were designed with guidance from the City of Paso Robles *LID parking Lots Low Impact Development Technical Assistance Memo*.
- Impervious surfaces are disconnected from the storm drain system by directing runoff from paving and roof down spouts to vegetated areas. Runoff is then conveyed to the storm

water ponds by sheet flow or in bioswales instead of in storm drain pipes as much as possible. This allows for water treatment and runoff reduction through bioretention and infiltration.

- Three 2-foot deep storm water ponds will be used on the site to mitigate both the 85th percentile storm and the 100-year runoff requirements. These vegetated ponds will be hybrid retention / infiltration ponds that will employ stepped outlet structures to retain the 85th percentile runoff to a depth of 6 inches. During larger storm events runoff will be metered through the outlet structures at the pre-developed rate.

Existing Property Description

The 20 acre property is located on Buena Vista Drive on the intersection of Experimental Station Road and Buena Vista Drive just north of La Quinta Inn. Cuesta College North County Campus is located directly north of the property and existing office buildings and future neighborhood commercial is located west of the property. The properties to the east are low density residential. The property is generally flat with two hillocks near the center of the property. There is no significant vegetation on the property aside from 2 small oak trees. There is a natural drainage area in the southwest corner of the property which drains into an adjacent creek. The project is fronted by Buena Vista Drive, identified as a two lane divided arterial and will serve as the project main entrance.

In 2004 the property was rezoned with a Resort Overlay. The City Council approved a Resort/Residential project for an 80 room resort hotel, Parisian Bakery, conference rooms, culinary school, spa, retail shops, caretaker housing and 17 single family homes on half acre lots. The project was never constructed.

In 2007 the property was rezoned to Residential Multi-Family with a proposed project consisting of 129 residential units. The Resort Overlay was removed from the property.

The current zoning is R2-PD Residential Multi-Family 9 units to the acre. Based on the average slope-based calculation method in the Paso Robles Zoning code, the property would be allowed 136 residential units. The property is within the Borkey Specific Plan area.

Market Demand

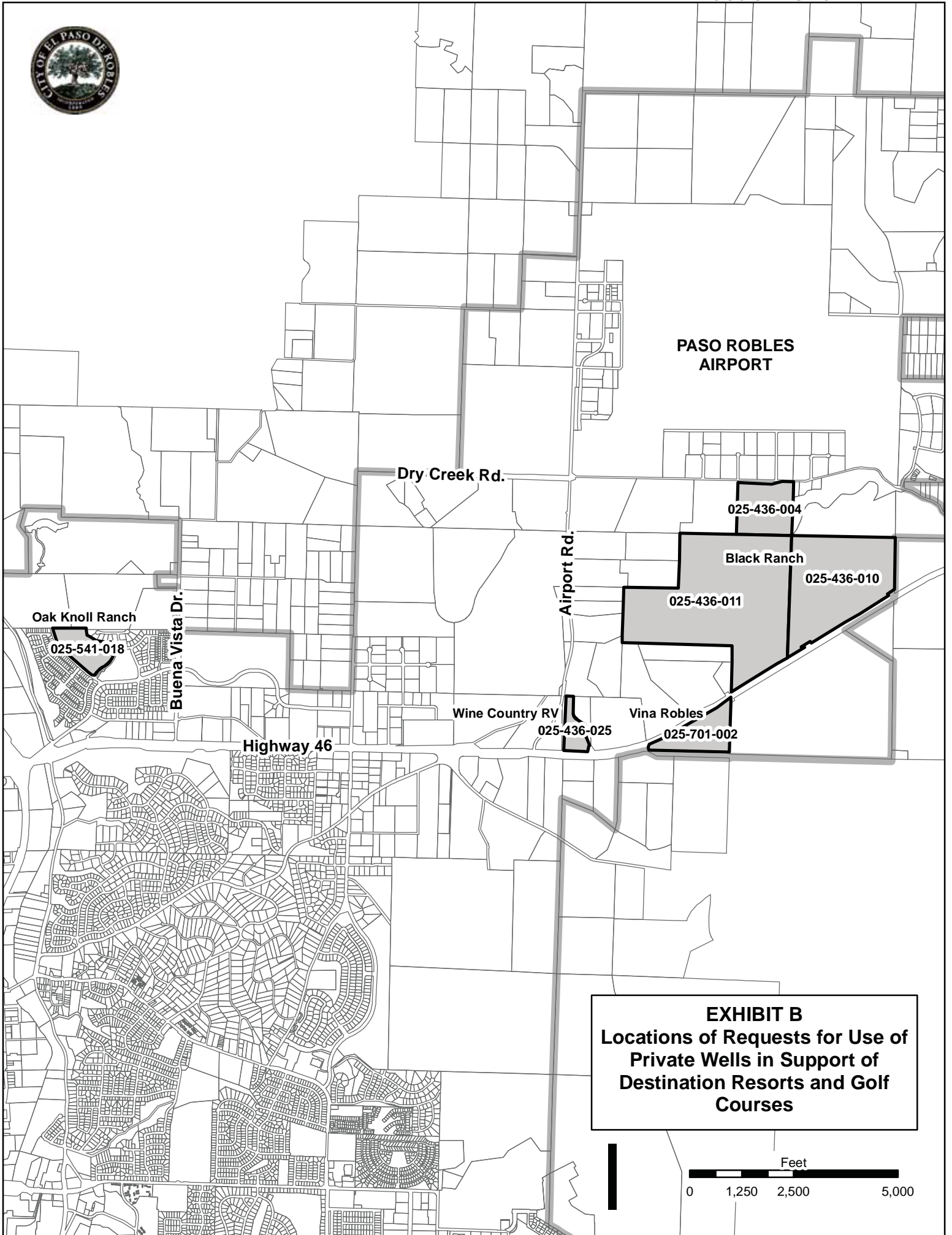
Ayres Hotels has closely examined the existing demand for hotel rooms in the Paso Robles area. We believe a full service hotel with meeting rooms can be absorbed into the market.

Community Financial Benefits

Short term benefits: Ayres Hotels has its own General Contracting division: Ayres Group. Ayres Group intends to utilize local contractors in the area for the new construction portion of the project. Typically, a new hotel provides between 300-400 workers with employment during construction.

Long term benefits: Ayres Hotels anticipates providing approximately 30-40 permanent jobs upon opening, which will offer opportunities for local residents.

The main measurable economic benefit for the City of Paso Robles will be derived from Transient Occupancy Tax and Sales tax generated from sales at the restaurant, spa and retail boutique. It is anticipated that the tax revenue in the first year is \$458,000 increasing to an estimated \$724,000 by the fifth year. In addition to the direct benefit to the City's General Fund, the spinoff economic benefits from visitors are considerable. Visitors will visit restaurants, purchase food, buy gasoline, shop in the downtown and spend money on local services and product.



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The University of Georgia
College of Agricultural & Environmental Sciences
Cooperative Extension Service
Drip Chemigation: Chlorine

Darbie M. Granberry, Extension Horticulturist; Kerry A. Harrison, Extension Engineer;

William Terry Kelley, Extension Horticulturist

Chlorination to Control Algae and Bacteria

Algae and Bacteria

Algae -- Fresh water algae are microscopic green plants that require light for growth. When we see algae in ponds, we are actually looking at colonies of algae. If algae get inside irrigation lines, they reduce water flow through pipes and eventually clog emitters. Because algae require light for growth, they do not grow in buried pipelines, in black polyethylene laterals or in other conduits that effectively prevent light penetration.

Although enough light may enter exposed white PVC pipes or fittings to permit algal growth, this problem can be prevented by painting PVC pipes and fittings with a blue gloss paint. If algae are growing in your irrigation pond, apply chemical treatment according to the recommendations in the current Georgia Pest Control Handbook. Treatment of the water source and adequate filtration will prevent the introduction of algae into your chemigation system.

Bacteria -- Some bacteria can live inside pipelines and drip tubes. They form bacterial slime, which clogs emitters. Bacterial clogging problems in drip irrigation systems are usually caused by sulphur and iron bacteria. These bacteria and the nutrients required for their growth can be present in both well and surface water.

Chlorine Injection Interval

Chlorine injection will prevent clogging of lines and emitters by algae and bacterial slime. Continuous injection of small amounts of chlorine maintains low concentrations of chlorine in the system and prevents their growth. However, periodic injection of larger amounts of chlorine is the preferred treatment for controlling algae and bacteria in drip systems.

You do not need to inject chlorine if you are using municipal water that is already chlorinated. However, if your irrigation water has not been chlorinated, you should be prepared to inject chlorine as needed. Vegetables are often sequentially cropped with the same drip system. In these situations, it is advisable to

chlorinate the system at the end of each cropping season or more often if bacterial clogging occurs. If water quality is extremely poor, it may be necessary to chlorinate at the end of each irrigation cycle. Experience is helpful when determining the appropriate intervals between chlorine injections.

Recommended Chlorine Formulations

Liquid sodium hypochlorite (NaOCl) is the easiest form of chlorine to handle and is the type most often used for treatment of drip irrigation systems. It is readily available in supermarkets and other stores as common household bleach (5.25% chlorine). Liquid chlorine is also available from some swimming pool companies as a 10% chlorine solution.

Chlorine gas (Cl₂) can be injected. Although it is an inexpensive source of chlorine, chlorine gas is more difficult to handle and requires more expensive injection equipment. In addition, chlorine gas is very poisonous and must be handled with extreme caution.

Caution: Powdered calcium hypochlorite Ca(OCl₂), also called High Test Hypochlorite (H.T.H.) Is a dry powder commonly used in swimming pools. However, H.T.H. is not recommended for injection into drip irrigation systems. When mixed with water (especially at high pH), the calcium contained in H.T.H. can form precipitates.

Initial Chlorine Injection Rate

As chlorine is injected, some of it reacts with bacteria (as it destroys the bacteria) and other forms of organic matter in the irrigation lines. This "reacted" chlorine is chemically bound or "tied up" and is no longer antibacterial. Chlorine that has not reacted remains as "free residual chlorine." Only this free chlorine is available to destroy bacteria and to continue treatment of the system.

For chlorination to be effective, you should maintain 1 to 2 ppm free chlorine in the system for 30 to 60 minutes. Usually, an initial concentration of 5 to 6 ppm is required in order to maintain 1 to 2 ppm free chlorine. Samples for determining the initial chlorine concentration should be taken near the point of injection. However, samples should be taken far enough past the point of injection that the chlorine is uniformly mixed in the irrigation water.

The following equation can be used to calculate the injection rate.

$$\text{Injection rate gal/hr} = 0.03 \times \text{GPM} \text{ divided by } \% \text{ chlorine.}$$

Example: The desired initial chlorine concentration in irrigation water just past the point of injection is 5 ppm. Assume a drip irrigation system with a total flowrate of 100 gallons per minute (gpm) and that common chlorine bleach (5.25% chlorine) will be injected.

$$\begin{aligned} \text{Injection rate} &= 0.03 \times \text{GPM} \text{ divided by } \% \text{ chlorine} \\ &= 0.03 \times 100 \text{ divided by } 5.25 \\ &= 0.57 \text{ gal/hr} \end{aligned}$$

The chlorine solution must be in contact with algae and bacteria for at least 30 minutes to successfully treat the drip irrigation system. To ensure that all parts of the system receive a minimum of 30 minutes' contact time, inject chlorine for one hour.

For convenience, the injection rates (gal/hr and oz/hr) required to give an initial concentration of 5 ppm

chlorine have been calculated for selected flow rates in Table 3.

Table 3. Chlorine Injection Rate* (gal/hr and oz/hr) for an initial concentration of 5 ppm chlorine.

****	5.25% Chlorine Solution	****	10% Chlorine Solution	
Water Flow (gpm)	gal/hr	oz/hr	gal/hr	oz/hr
10	0.06	7.7	0.03	3.8
20	0.11	14.1	0.06	7.7
30	0.17	21.8	0.09	11.5
40	0.23	29.4	0.12	15.4
50	0.29	37.1	0.15	19.2
75	0.43	55.0	0.22	28.2
100	0.57	73.0	0.30	38.4
150	0.86	110.1	0.45	57.6
200	1.14	145.9	0.60	76.8
250	1.43	183.0	0.75	96.0
300	1.71	218.9	0.90	115.2
350	2.00	256.0	1.05	134.4
400	2.29	293.0	1.20	153.6
450	2.57	329.0	1.35	172.8
500	2.86	366.0	1.50	192.0

* During chlorination, the injection rate should be adjusted to maintain 1 to 2 ppm free chlorine at the emitter farthest from the point of injection.

Maintaining Free Residual Chlorine Concentration

During chlorination, maintain 1 to 2 ppm free chlorine at the point in the system where the concentration is lowest (usually at the point farthest from injection). If the irrigation water has a pH of 7.5 or less, 1 ppm free chlorine is sufficient. However, for alkaline water with a pH above 7.5, maintain 2 ppm. The free chlorine concentration drops as the chlorine reacts with organic matter in the lines. Therefore, to maintain 1 to 2 ppm free chlorine in the lines farthest from injection, it is often necessary to maintain a concentration of 5 to 6 ppm free chlorine near the point of injection. The specific concentration necessary (near the point of injection in a given zone) depends on water quality and the quantity of bacteria, algae and other organic matter in the lines. Maintain the recommended free chlorine concentration at the most distant emitter for 60 minutes. This requires frequent testing of the free chlorine concentration and subsequent adjusting of the chlorine injection rate if needed.

To ensure that the free chlorine concentration is maintained at 1 to 2 ppm, measure free chlorine concentration at the emitter most distant from the injection point approximately 10 minutes after injection is initiated. This can be done by using a D.P.D. (N,N Diethyl-P-Phenylenediamine) test kit, which measures only free residual chlorine. These test kits are available from chemical suppliers and from most drip irrigation dealers.

Caution: The orthotolidine type test kit, often used for swimming pools, measures total chlorine content (not free residual chlorine) and, therefore, cannot be used satisfactorily for drip systems.

In cases where the injection pump cannot be calibrated low enough to inject 5.25 percent or 10 percent liquid chlorine at the desired rate, dilute the chlorine solution prior to injection. This permits the use of a higher injection rate within the capacity of the injector pump.

Example: Assume you need to inject gallon of 5.25 percent chlorine into your drip system during a one-hour injection period. If your injection pump can inject no less than 2 gallons per hour, add 1 gallons of water to the 5.25 percent chlorine to give a total chlorine solution of 2 gallons. Then set the injector pump to inject 2 gallons per hour.

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RESOLUTION NO. 12-xxx

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES
TO DENY THE REQUEST TO DRILL AND OPERATE A PRIVATE WELL
(AYRES HOTEL, BUENA VISTA DRIVE)

WHEREAS, the City has received an application from Ayres Hotels for the development of a hotel, resort and spa on 20 acres of property located at the northeast corner of Buena Vista Drive and Experimental Station Road; and

WHEREAS, included in the application, Ayres has requested permission to drill and operate a water well to irrigate 10 acres of vineyards and olive orchards planted as an amenity to the resort; and

WHEREAS, water is available to the subject property from a 12-inch water main in Buena Vista Drive; and

WHEREAS, groundwater in this area is in a chronic state of decline; and

WHEREAS, in July, 2011, the City Council adopted the 2010 Urban Water Management Plan (UWMP). The UWMP establishes policy to serve new development with surface and recycled water sources.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

SECTION 1. That the City of Paso Robles does hereby deny the request for use of a private well by Ayres Hotels for property at the northeast corner of Buena Vista Drive and Experimental Station Road.

SECTION 2. That the City Clerk be authorized to cause a certified copy of this Resolution to record in the Office of the County Recorder of the County of San Luis Obispo, State of California.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 6th day of March 2012 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

Duane Picanco, Mayor

ATTEST:

Caryn Jackson, Deputy City Clerk