

## Minutes of a Special Meeting of the Common Council of the Town of Clarkdale held on Tuesday, April 11, 2006

A Special meeting of the Common Council of the Town of Clarkdale was held on Tuesday, April 11, 2006 at 5:00 p.m. in the Men's Lounge, Clark Memorial Clubhouse, 19 N. Ninth Street, Clarkdale, Arizona.

**Town Council:**

Mayor	Doug Von Gausig
Vice Mayor	Jerry Wiley
Councilmember	Pat Williams
	Frank Sa
	Tim Wills

**Town Staff:**

Town Manager	Gayle Mabery
Comm. Dev. Director	Sherry Bailey
Public Works Director	Steven Burroughs
Finance Director	Carlton Woodruff
Deputy Town Clerk	Walt Good
Admin. Assistant	Janet Perry
Fire Chief	Jerry Doerksen
Police Chief	Pat Haynie

Others in Attendance: Curtiss Bohall, Ellie Bauer, Greta Schiegg and Dan Leuder.

**AGENDA ITEM: CALL TO ORDER** - The meeting was called to order at 5:02 p.m. by Mayor Von Gausig noting that all Council Members were present.

**AGENDA ITEM: WORKSESSION** - A presentation by Ken Knickerbocker and Lani Good on the Arsenic Study for Clarkdale Municipal Water System.

The presentation by Mr. Knickerbocker and Ms. Good, representing Coe and Van Loo Consultants, Inc., included the following issues:

1. Arsenic Mitigation Study
  - a. Identify arsenic type and concentration
  - b. Investigate treatment and non-treatment options.
  - c. Make recommendations for mitigation of arsenic

- d. Present costs associated with recommendations.
2. U.S. Environmental Protection Agency arsenic rule:
  - a. Former arsenic maximum contaminant level (MCL) was 50 ppb (parts per billion).
  - b. New MCL set as 10 ppb In January 2001
  - c. Arizona enforcement date is December 2007.
3. Study area consists of the Town of Clarkdale.
4. Design considerations
  - a. Three wells require mitigation: Well #3 at 89A, Mountain Gate, and Mescal Wash.
  - b. Multiple wells combined for treatment
  - c. Water chemistry
5. Well Properties
  - a. Well capacity
  - b. Arsenic concentration
6. Historic arsenic concentrations vary from 2 ppb to 19 ppb.
7. Design considerations
  - a. Space required for treatment equipment.
  - b. Waste disposal options are recycle backwash or sewer
  - c. Pressure loss from transmission lines or additional equipment
  - d. Redundancy required.
8. Non-treatment options
  - a. Abandonment
  - b. Pump discharge rate adjustment
  - c. Blending
9. Non-treatment recommendations are to blend Well No. 3. Treat the entire stream of the Mountain Gate Well and blend with the raw water from Well No. 3. Produces a blended arsenic concentration below 7 ppb.
10. Treatment options

- a. Wellhead treatment
  - b. Central treatment. Water from multiple sources is piped to a central location for treatment.
  - c. Single well sidestream treatment. A portion of the raw water stream is treated and a portion of the raw water bypasses the treatment unit.
  - d. Point of use (POU) treatment. Treat water at a single tap.
11. Proposed treatment units
- a. Mescal
  - b. Mountain Gate and Well No. 3
12. Treatment process alternatives considered
- a. ADI- iron based adsorption
  - b. Basin water ion exchange system
  - c. Basin water - ion exchange system
  - d. Layne Christensen coagulation/filtration
13. Individual analysis of Mountain Gate well and Well No. 3 with backwash recycle system and of Mescal well with backwash waste to sewer.
14. Estimated treatment costs for capital, operation and maintenance.
15. Recommendation of Coagulation/Filtration
- a. Most cost effective lifecycle cost
  - b. Automated systems
  - c. Low operation & maintenance requirements
  - d. If possible, discharge to sewer
  - e. Pilot test both sites by Filtronics, Kinetico and Layne Christensen (lowest lifecycle costs).
16. Pilot testing may lower capital and O & M costs.

**Dan Leuder**, City of Cottonwood Utilities Director, stated the following in response to questions:

- 1. Well No. 1 would not be reactivated.
- 2. Each well works in a crack in the aquifer so they are connected but not the same.
- 3. Wells would be treated in gravel to reduce arsenic.
- 4. Goal of 7 ppb for blended wells. Ion

treatment byproduct is non-hazardous and may be placed in landfill.

Mr. Knickerbocker and Ms. Good stated the following in response to questions:

- 1. The mitigation system is chlorine sensitive.
- 2. Test information was taken from Cottonwood Water Works records.
- 3. Recommend pilot testing before bid process at the Town's cost.
- 4. Testing gives testers an advantage over non-testers.
- 5. There would be a guarantee that mitigation would work from the mitigation equipment vendor..

Vice Mayor Wiley stated the Council would have to find a legal way to get a pilot test and not give the bidder an advantage.

Town Manager Mabery noted there is a pipeline up Black Hills Drive that would facilitate blending the Mescal and Haskell Springs wells.

**AGENDA ITEM: FUTURE AGENDA ITEMS** – Listing of items to be placed on a future council agenda.

None.

**AGENDA ITEM: ADJOURNMENT** – With no further business before the Council, and without objection, the meeting was adjourned at 6:01 p.m.

**APPROVED:**

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Doug Von Gausig, Mayor

**ATTEST:**

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Walt Good, Deputy Town Clerk

**SUBMIT:**

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Charlotte Hawken, Administrative Assistant