

OCTOBER 26, 1982--3:15 P.M.--CONTINUATION OF OCTOBER 20, 1982 MEETING

PRESENT: G.E. ROBERTSON, JR., CHAIRMAN ELECTION DISTRICT #2
STEVE WEBER, VICE-CHAIRMAN ELECTION DISTRICT #2
M.I. HARGRAVE, JR. ELECTION DISTRICT #3
A.S. CLAY ELECTION DISTRICT #4

ABSENT: G.S. BENNETT, JR. ELECTION DISTRICT #1

The Chairman stated that the new Health Department regulations on wells, septic tanks and drainfields were scheduled to go into effect November 1, 1982. The regulations were causing problems for the well diggers as well as additional cost to the homeowners. The well diggers, therefore, had requested help in this area and invited the Homebuilders and other interested parties to be in attendance at this meeting. Other local government officials have been invited along with representatives from the State Health Department.

The Chairman further stated that he had been enlightened by phone calls and by reading the new regulations. He felt the basic problem was how to dig a well and grout it 20 feet without the soil elapsing. He indicated there were also problems with the different forms required for septic systems. Of all the people contacted, he had concern expressed throughout the State. The following areas were present at this meeting: Prince George, Chesterfield, Lunenburg, Nottoway, Amelia, Hanover, Brunswick and Mecklenburg. He concluded saying that hopefully from this meeting, they could come up with something that would make the regulations a little easier to live with.

Ted Baxter representing the well diggers, made the opening remarks. He stated that he would like to review the problems they had discussed at the earlier meeting.

1. The first problem is concerning the forms required. The Application to Install Septic System. Now an applicant meets the Sanitarian at the site, he checks the lot and issues the permit or turns it down. Two forms are issued. The new regulations are requiring fourteen papers signed and filled out in detail per installation.

2. The questions on the application require research. The biggest problem is the detailed drawing and sketch to scale. Mr. Baxter felt the average homeowner will have to hire some type of help to get all the information. He stated you have to locate everything within a 200 foot radius of the proposed location of the building site. If there is an error, the individual will have to start all over again. He felt they will need a consultant because people don't know what systems they have.

3. There will be a big holdup because of all the paperwork.

4. Mr. Baxter stated he had started the design for a new distribution box. The landowner and the builder are concerned about the finished product. The regulations require a minimum of a 22" distribution box and with a 24" ditch to get the flow of gravity, the distribution box will have to be on top of the ground.

5. A certain type of pipe is required. He stated he could see the benefit but it will be an added cost.

6. Brown, untreated paper is required in the ditch. This will be an additional cost.

7. Wells -

A. On bored wells, have casing in center; dig well larger than casing. Come to depth of 20 feet, and he stated he had tried pumping and had problems. With 65 to 70% of wells in counties, only 25% will stay open to do process. He stated he tried it in

an area. He mixed cement and started pumping. The hole stayed open, cement went in the backfill and grouting penetrated the area. He indicated that he mixed the water and cement and ended up with 60 bags of material. He hit a 26 ft. water level and penetrated past it to 35 feet. If it had not been a 60 foot well, it would have cut off the water vein.

Mr. Baxter then explained how the bored well was put in now referring to Drawing D of his material.

B. He then explained the difference between drilled wells and bored wells. He explained a bored well is a reservoir well that works on the reserve principal drawing from the bottom. As you use the water, the well recovers. The concrete casing is about 24-34" in diameter.

With a drilled well, the casing is 4-6" in diameter. You hit a rock at 50 feet on. Set casing 5 to 6 inches in rock and drill to water vein. You can tell with machine what the water flow is going to be. He stated there is no way to guage water flow from a bored well; therefore, you could not guarantee the customer 5 gal./min. in a 4 hour flow.

He added that the drilled well is \$11/ft and sometimes you can go 400+ feet before hitting water. He indicated that was the case in the well for the School Bus Garage.

Mr. Baxter stated they had dug test sites in Chesterfield, Dinwiddie and Prince George to show the problems. All wells will not be dug the same way. There will be a problem waiting for the paperwork and they didn't really know how to establish a charge for the work.

Mr. Henry Dowdy of Dowdy's Well and Septic Service spoke next. Mr. Dowdy indicated that he was very concerned and had been to many meetings, since the State started their draft in 1970. He stated then that the Health Department was asking for things that were impossible.

1. Joints have to be watertight. He stated if this was so, all well contractors should park their machines. They know you can't get water if the joints are watertight.

2. The regulations require you to pump neat cement in well to prevent surface water from coming in. He indicated the general contractors would not allow them to pour the seals. They wanted to pour their own to save money. They cut corners and that's where the problems started. State geologists said wells must be water tight. He stated we know water comes through joints, so if you pour 10 to 15 ft. well seal, you cut off the surface water. He stated he was not implying the builders weren't good but they cut corners and the State Health Department knows it and bypasses it. Now they're taking the rules and regulations for deep wells and applying them to shallow wells. He stated that backfill doesn't always follow casing. Sometimes you can drill faster than its falling in. Can't get casing in ground unless opening is bigger than casing. It will slump in. Past the 20 ft level, have openings with irregular shapes. General contractors pour seal and shut off vein completely. State Health Department took no action. People pump off reserve and they're out of water. If this happens in conventional method, it will happen in pumping grout. It's impossible to pump. When you pump, gravity will push it down before up. There's not a member of the Health Department that can show you how it can be done. It has to go down. Can't inspect or measure it without going to middle of well and breaking through casing. The Sanitarians don't know how it will be inspected. Mr. Dowdy stated he knows how to cheat and he feels these rules will force mass misrepresentation. He indicated he would let general contractor sign off on permit. He added that the Sanitarians don't have the tools to inspect it and the homeowners can't afford it. It is an impossibility. If it falls in at 15 feet, can't go 20 feet, it will block the vein. He stated in Gloucester, he had two deep wells to grout at 15 to 20 feet. He said he had to lie or not do the job. They're trying to put deep well rules on shallow

wells. A bored well is better and cheaper. They are going about a cement seal in the wrong way. Should let the well contractor decide. With slope rules, actually need more than 20 ft. grout, and you'll seal off the veins. You cannot stop it from pushing down as weight builds up.

Mr. Billy Williams, Chairman, Prince George Board of Supervisors, spoke next. He directed his comments to the State Health Department who he was sure acted in good faith. But on any regulations covering any subject:

A. Include workers who do nuts and bolts in writing regulations.

B. Always remember best regulations should be concise, brief and include common sense.

He stated he felt we have been over-regulated and over-protected and this has happened with these new regulations. He hoped the Health Department will listen to the well diggers and do like they did in North Carolina, make modifications for a working solution.

Mr. Allan Mitchell, a well digger for 19 years, spoke next.

1. He doesn't see a real need for the pump test. In drilled wells, when you hit 10, you get 10. Bored wells aren't designed for flow.
2. He has been grouting wells at 10 feet since the Health Department first required it. Since that time, he has had virtually no complaints. Now at 20 feet, you have soup. Could leak anywhere. He stated he would like to see the 10 ft. grout made law. He knows 10 feet will work. Ninety percent of the problems he has had with wells is the customer getting muddy water because the plumber knocked a hole in the side of the well.

The Chairman opened the floor to the Health Department officials.

Dr. Robert Stroube, Assistant Health Commissioner, spoke first. He started by explaining how the regulations got to where they are now. He said they prepared the draft and have distributed it in the past five years. They received public input and documented all the comments received at the meetings held up to the Spring of 1981. They were then ready to promulgate them. They met with Delegate Glasscock who met with the homebuilders. The concern expressed then was with septic tanks. On July 1, 1981, the General Assembly reviewed the regulations and held hearings. The 1982 session voted to defer the regulations but it was defeated. Because of adjustments in getting started, through the Governor, they did get them deferred until November 1.

The regulations do provide for a Sewage Handling and Disposal Advisory Group. They are representative of interested parties for an on-going review of problems with the regulations.

Mr. Eric Bartsch, Director, Division of Water Programs, spoke next. He indicated that the Advisory Committee met October 6, 1982 and will have another meeting the first week in January. They will receive feedback then and see how things are going.

1. He addressed the paperwork first. He stated there was an application blank with the basics--what the Sanitarian needs to locate and make a test at the site--name, address, location, planned usage, etc, very rudimentary.

2. Appendix II-1--General outline or sketch of lot. He stated that it does not have to be to scale. They also ask where are other things located that might affect the well. The individual can pace them off and give an idea of distances. He stated the worst case is when a permit is allowed and a septic system contaminates a neighbor's well. So, they do want approximate dimensions. They have written instructions for the staff and a copy will be provided the applicant. The staff will work with the applicant to fill out the form. The Sanitarian needs to know what to look for when he goes out. Most of the forms are for the Health Department's use.

3. The Sanitarian has to put holes in the ground. He records this information to determine what the soils can be used for. If a percolation test is required, there is a form for this also. The Sanitarian records his information for all to understand.

4. The construction permit and inspection form. Mr. Bartsch stated that this form shows the contractor where the system must be installed and the specifications. It can also be used to solicit bids. The Sanitarian must inspect the system before it is covered. This is also documented on the construction permit and a copy given to the owner showing the system is working properly. The first basic application is the only one the public has to fill out.

5. A signed statement is required by the contractor when he finishes the job to say it was done to the specifications. This is given to the owner and the owner gives a copy to the Health Department.

Mr. Bartsch stated that the Health Department or any agency has authority over a well only when it is installed with a septic tank on the same lot. No one has authority over a well otherwise.

6. Water Well Completion Report - If a well is going to be put in, the Sanitarian shows where the well is to be put. A GW-2 form is filled out by the well contractor for the State Water Control Board. The Health Department is to be furnished a copy and they will accept it. The Sanitarian will use that to answer questions on his inspection form.

7. Operation Permit - Under the Uniform Building Code, an Occupancy Permit has to be issued. Under a Memorandum of Agreement signed between the Health Department and HUD, the Building official will not issue the Certificate of Occupancy until he receives an Operation Permit from the Health Department.

Mr. Bartsch then addressed the questions concerning the distribution box. He stated that they set the freeboard regulations. The height of the box must be above lines that come into it. The bottom is 4" below the invert. It is a standard FHA box. They use their standards nationwide. Mr. Baxter indicated that he didn't know of any box that size. He stated he put his present box in an FHA house and the Health Department approved it.

Mr. Bartsch again indicated it was an FHA design. He stated that the boxes used today are not outlawed. If the contractor has a lot on hand, they can use them up. The Health Department will make a determination on a case by case basis. Under Part D-Exceptions, the field staff are allowed to grant exceptions. The regulations require substantial compliance only.

Mr. Dowdy indicated since discussing the regulations earlier, he had talked with a supervisor over several counties and they had not received the first word or heard anything about accepting situations.

Mr. Bartsch stated they had held several staff orientation workshops in the past two weeks and that question has been covered. He suggested they talk to Mr. Burnett about any problems.

Mr. Dowdy asked about the form design that can't be used.

Mr. Bartsch indicated it depends on whether the form meets substantial compliance.

Mr. Sam Bland asked what the additional cost will be to the consumer.

Mr. Bartsch indicated that they held fourteen workshops and received written and verbal comments. They asked the contractors if they saw any difference in cost with the new regulations. They stated it looks like business as usual except we know what do do now.

Mr. Bartsch stated that the crush strength pipe is 1500 feet rather than 1,000. The contractors indicated they needed stronger pipe.

He stated the percolation rates allow 120 min/inch which very few States allow.

He stated the square footage requirements are identical.

Mr. Bartsch indicated he had not seen an increase in cost from the regulations.

Mr. Bland asked why weren't the localities notified of the public hearings. Mr. Bartsch stated they were. They had a mailing list with over 1,000 names on it. In 1981, they had 200+ at the workshops. The General Assembly held 8 public hearings between June 1981 and February, 1982. It was in the newspapers. All changes were mailed out and every written comment was answered.

Mr. Bland asked what percentage of complaints had they received about contaminated wells.

Mr. Bartsch said that was hard to answer because they did not receive the hard cases. He estimated 2 to 3 calls per week. They don't keep cumulative records.

Mr. Bland stated that the local governments should have been informed.

Mr. John Kines, County Administrator, Prince George, stated he had not received any information from the Health Department. A lot of it looks like bulk mail. He felt the local health officials should have been asked to contact the Boards and Councils. He had heard they were actually told not to involve the local governments. Mr. Bartsch indicated that was incorrect. They wanted their involvement. He added that he didn't know why they didn't receive the information. They had the right address. They had mailings from 1979 until now. He knew they sent it to local governments but he couldn't guarantee Uncle Sam delivered it.

Mr. Kines reiterated that local health officials should have been told to contact Board members.

Mr. Bartsch thought this was done because they did receive some comments from Boards.

Mr. Kines stated that it was another state mandated program without additional funding provided. Additional money would be needed in the local Health Department budget.

Mr. Bartsch stated they were only providing a place for the Sanitarian to record the information. He is already doing the work. The public will have a record now.

Mr. Williams asked since Prince George did not receive the information, did Dinwiddie get it. The Chairman stated that the first information they got was about a month ago.

Mr. Bartsch stated information was mailed out 18 months ago and in August of this year. He could guarantee it was put in the mail.

Mr. Robertson stated that when the Health Department wanted more money, the Board got the message. He was concerned about this additional paperwork because the County was told it might lose a Sanitarian.

Mr. Bartsch stated it was mailed out.

Mr. Barnes, Chairman of the Board, Lunenburg County, stated they didn't get it. He indicated he was concerned about the memo sent to well diggers about 24 hour notice.

Mr. Bartsch indicated he got a letter from Brunswick about it and it was not a State Health Department regulation. It was a local requirement by Dr. Graham. He added a letter was going out to Dr. Graham concerning this.

Delegate Beasley Jones asked how they were going to handle the grouting.

Ted Baxter wanted to make one more comment before they moved to wells. He indicated there would be a \$300 additional cost on the 1500 lb. pipe. Mr. Bartsch stated they did not have to use brown paper.

Mr. Baxter indicated that with a higher percolation rate, you need more drainfield. Mr. Bartsch stated the slower the water gets, more area needed. You would rather provide a larger area than have the permit turned down.

Mr. Baxter stated he had been told it had to be 120 min./inch.

Mr. Bartsch reviewed the regulations stating a special permit was not required.

Mr. Bartsch then addressed Mr. Jones' question concerning wells. He stated there was a concern about 20 ft. casing and grouting on shallow wells. He indicated if they followed the rules most States had on soils allowed, they would rule out most of the State. So you set system in at water level and grout and case at 20 feet to eliminate surface water contamination. Mr. Bartsch explained that bored wells can be grouted similar to drilled wells. Bring gravel up to 20 feet. Prepare concrete. Pour on gravel and put case on top. Take pellitized betanite and put it on top of gravel. It swells and plugs hole. Then grout on top to surface.

He stated the regulations on cement call for up to 6 gallons of water per bag. You can use a tremie pipe or pump. Adjust as you need to. Start from bottom to surface. Make a seal so water doesn't get in. Alright for water to go to bottom and come in.

As to caving problems, you can have that in hard rock. May not be able to provide 20 feet. The Field staff can allow exceptions. They will go 17 or 18 feet if that's all you can get. They just don't want the people to get sick.

Mr. Jones stated that 20 feet is not a minimum then. Mr. Bartsch indicated it can be handled on a case by case basis.

Senator Eva Scott asked what instructions have been given to the Sanitarians about making a decision to grant exceptions.

Mr. Bartsch advised her they have been given a manual on exceptions. It is also in the regulations. He added they are not hard and fast rules.

Mrs. Scott indicated that the people who do the work don't know what these exceptions are and that can be a problem.

Mr. Bartsch stated that all were approaching November 1 with trepidation. Some will take these regulations as the Ten Commandments and others will substantially comply. But we all must work together. If we find out they're not working, we can make some changes.

Mr. Allan Mitchell asked who he was to talk to about an exception if he runs into a problem.

Mr. Marion Burnett, Regional Sanitarian Supervisor, stated that the minimum standards are set. They do not want the exceptions to become the rule. It is incumbent upon the well diggers to ask for an exception when it is a unique case. He has a responsibility. Every job can't be an exception.

Mr. Mitchell asked if he grouted below 20 feet because it was caving at 9 feet and signed off on the permit, what will happen if the Health Department doesn't approve it. Ted Baxter added that 75% of the wells will cave. Someone from the audience indicated this was true in the Northern Neck and all the surrounding areas. Mr. Baxter added they will not stay open 20 feet. They are not isolated cases.

Mr. Jones asked if the regulations will be reviewed again in January, 1983.

Mr. Bartsch said yes, the Advisory Committee will meet.

Mr. Jones asked if local governments will be notified.

Mr. Bartsch indicated they have a representative on the Committee.

Mr. Jones stated he would like people here today to know about the meeting and be heard.

Mr. Bartsch stated the Virginia Water Well Works Association representative will be there. It is a public meeting.

Mr. Willis Sitzer, asked if one well digger at any of those meetings agreed with cement and water grout.

Mr. Bartsch said yes, from Virginia Beach.

Senator Richard Holland stated apparently the regulations will go into effect November 1, 1982. After November and December, at the January 1, 1983 meeting the Health Department will receive testimony whether they are working. The rules can be changed. The well diggers should be heard. The legislators don't always recognize the rules as the Statutes they passed. He added he was delighted they would be holding a meeting as early as January.

Senator Scott indicated she felt the meeting was helpful and the people doing the work should be heard. She felt the Health Department has a better insight now. If the well diggers do have problems she wanted them to let her and the other representatives know.

Delegate Lewis W. Parker stated that he echoed the Senators' remarks. He wanted his people to stay in touch with him. He would make them aware of the meetings. He still wanted to find out more about the grout and distribution box. He appreciated the openness exemplified by the State Health Department.

Dr. Stroube stated apparently there were some problems getting the information out. He advised them if he could get the names and addresses, he would send a notice about the Advisory Committee meeting to those interested. He added that comments could be submitted any time.

Mr. Robertson asked him if he had learned anything today that would be of any help to the well diggers. Dr. Stroube indicated he had learned more about the well problems.

Mr. Hargrave stated it would be good to have the Health Department examine the 10 ft. wells to see what is actually causing the contamination problems. He added alot of people are uncomfortable with the pressure grouting. Mr. Hargrave stated that all the people in the field are going to strive to enforce the rules. He reminded the Health Department that the County had to deal with a Sanitarian before who was very capricious in his decisions and they finally moved him. He felt the people had been stung. The field personnel will not be comfortable to make exceptions or maybe be as understanding.

Mr. Weber stated there seems to have been a problem with communications to the Sanitarians and the County and this needs

to be improved. He felt the well diggers are not getting the same information. He wanted all to work together to protect the people. He also does not want the cost to run up. He felt meetings with the Sanitaricians and well diggers would be helpful.

Senator Scott stated she would like to know more about the extra costs.

Ted Baxter indicated that the extra \$300 he spoke of was on the septic system alone. The wells could be anywhere from a \$500 to \$3000 additional cost. He added they will have to go to a drilled well when the bored well doesn't meet specifications. When you go deeper, a larger pump is required and more treatment is needed which will add to the costs. Senator Scott stated this extra cost was a concern to all.

Mr. Willis Sitzer stated that on a bored well, neat cement is costly. He added that someone way out West wrote the 20 ft. regulations. He stated they just as well drill the wells, The neat cement is too costly.

Mr. Dowdy stated they cannot afford to pump cement grout. He said they won't get blockage at 1½ inches and may cave in at 10 feet. He stated they would pay the Health Department representative \$1,000 to show them how to block. It takes pounds of cement to fill cavity. They can't show us how do do it without pushing it down.

Mr. Mitchell stated they came to the meeting to get some changes but he didn't feel anything has changed. He asked if it would be possible to get some tests run so he wouldn't buy alot of equipment and find out it isn't needed in January.

Dr. Stroube advised him he could work with Mr. Bartsch at the actual site. Mr. Mitchell indicated he would meet him anywhere, but preferably in Dinwiddie because of the cost to move his equipment.

Mr. Mitchell asked what will happen if they find it can't be done.

Dr. Stroube stated he couldn't answer that because they would have to talk to the lawyers. The delay of the regulations until November 1 was done by emergency legislation through the Governor's office.

Mr. Robertson asked what good the public meeting will be if they can't change the regulations.

Dr. Stroube indicated they could change them but not by November 1 because of the public hearings required to be held and the General Assembly review which could take six months altogether.

Mr. Baxter reminded them that this process had been tried in 1972 in N.C. and they abandoned it.

Mr. Marshall Johnson, representing the Homebuilders, stated it sounded like two different ball games and they needed to get their acts together. He thanked them for being invited to the meeting. He indicated that he hated to see the well diggers buy all that equipment and find out in January it wasn't needed. And they certainly can't pass anymore costs to the home buyers.

Mr. Hargrave asked if they couldn't waive the enforcement until the rules are set or at least until Mr. Mitchell has had a chance to show them a test site.

Mr. Robertson asked that the Health Department notify him about what can be done in that regard. He stated the test would be just so the well diggers wouldn't have to buy equipment unnecessarily.

Mr. Hargrave stated he would like to see the Health Department give some indication that they saw some of the practical problems today.

Dr. Stroube advised them that he could not commit the Commissioner. They held hearings from July 1, 1981 until now and that was the time to work on the regulations. He stated they would try to get the information out better in the future.

Mr. Bob Hines stated he sold to over 200 contractors. He indicated he had approached the Health Department when these regulations came out and they didn't change anything. The well diggers don't have \$50,000 for a pump. They can pour it and do the same job. He said they tried three test sites and Mr. Burnett received the results. Mr. Burnett stated he received the specifications only.

Mr. Hines stated that if they are allowed to pour, they would be putting water at a poor man's table and have a sanitary well.

The Chairman thanked everyone for coming. He felt the meeting was well conducted. He urged the well diggers to keep a record of their problems between now and the meeting and he would keep them as informed as possible. He was grateful to see all who came out for the meeting and he thanked the Health Dept. representatives.

Mr. Hargrave stated he would like to see a delegate from the group be heard at the committee hearing.

Mr. Bartsch advised him that they would have a representative from the Va. Water Well Works there and they should talk to him.

Mr. Hines and others stated that this individual would not represent them.

Mr. Hargrave asked again if a designee here could appear at the meeting. Mr. Bartsch stated they could.

Mr. W.W. Edwards asked what the well diggers were supposed to do until January 1. The Chairman advised Mr. Edwards the Health Department would get back to the Chair with some information.

Mr. Bartsch stated they could use a tremie pipe. Pour the cement in the funnel and keep going til they reach the top.

Mr. Edwards said with a 20 ft. cavity, they don't have enough cement to fill it up. Mr. Bartsch advised him they could fill it up now and use tremie pipe to grout. They weren't being asked to fill the cavity with cement.

There being no further comments, the meeting was adjourned at 5:37 P.M.

ATTEST:


W.C. KNOTT


G.E. ROBERTSON, JR., CHAIRMAN

