HUDSON, NH BOARD OF SELECTMEN April 16, 2002

Public Hearing on Burns Hill Landfill/Arsenic in Wells

Chairman William P. Cole opened the Public Hearing at 7:00 p.m. in the gymnasium at Library Street School.

Selectmen: William P. Cole, Shawn N. Jasper, Lisa A. Riley, Teresa Stewart & Ann Seabury

Staff/Others: Paul D. Sharon, Town Administrator; Priscilla Boisvert, Executive Assistant/Recorder; Rob Desmarais, Town Engineer; John

Ratigan, Legal Counsel; Nancy Nichols and Steve Lamb from GZA; Bernard Lucey, John Regan and John Splendor from NH DES; David Gordon from Department of Health and Human Services; Ann Lundregan, TEL; Dennis Shaughnessy, SUN; about

55 residents.

Chairman Cole said the purpose of this hearing was to provide information and allow the public to comment on or ask questions related to elevated arsenic in well water detected in the vicinity of Burns Hill Road, Wason Road, Mark Street and possibly affecting other private drinking water wells in this area. He introduced the Selectmen, Town staff and State officials and said there were to be three presentations, which will include background and history of the testing and findings to date, current assessment, plans and strategy for continued monitoring and future testing, possible implications from the Burns Hill landfill and potential health considerations due to arsenic in drinking water. He asked that comments and questions be held until all presentations have been made.

Steve Lamb, Hydrogeologist for GZA, said his work is to look at ground water and sub-surface contamination issues. Nancy Nichols, Professional Engineer and Project Manager for GZA gave a 20-minute presentation on the following points:

<u>Shallow Groundwater and Surface Water Parameters</u>: Field screening parameters; Volatile Organic Compounds (VOCs); Metals; Chlorides; Nitrate; Sulfate; Nitrogen (TKN)

Shallow Groundwater and Surface Water Quality Results: Consistent with leachate at GZ-2 and GZ-3 (Area of Seeps) typical results for field screening parameters; low levels (below AGQS) of six VOCs and chromium; elevated manganese; Arsenic and Selenium detected

Arsenic in Shallow Groundwater and Surface Water: Low level at GZ-2; Moderate level at GZ-3; Not detected elsewhere; Not detected in surface water

<u>Selenium in Shallow Groundwater and Surface Water</u>: Widespread low to moderate levels in groundwater; Detected in one surface water (SW-5) <u>Occurrence of Arsenic and Selenium</u>: Naturally occurring in local bedrock; Can be leached from bedrock; Biodegradation of landfilled materials can create conditions favorable for leaching--higher pH, less oxygen

<u>Conclusions from Hydrogeologic Study</u>: Leachate at GZ-2 and GZ-3; Selenium may be present due to landfill; Arsenic may be present due to landfill, but not likely--Not detected widespread same as selenium; Shallow groundwater flow discharging to surface water; Upwelling from bedrock at surface water

Water Supply Well Sampling: To be pro-active in face of uncertainty of possible landfill impact; Two events: Late 2001, Early 2002; First: Sampled nearest water supply wells on Wason, Burns Hill, and Mark St.--Arsenic, Selenium, and Manganese and Second: Sampled to confirm highest results and to expand sampling area; Arsenic and/or Selenium

Water Supply Well Sampling Results: Over half of wells sampled had arsenic above 0.05 ppm (=50 ppb) (18/34 wells); Only a few of wells sampled had arsenic below 0.01 ppm (=10 ppb) (4/34 wells); Manganese detected over 0.840 ppm (=840 ppb) in 2 wells)(2/25 wells); No selenium detected (20/20 wells)

<u>Current Assessment - Arsenic in Water Supply Wells</u>: Source of arsenic detected in water supply wells is likely naturally occurring; Background levels are elevated regionally; Possibly some landfill impact to arsenic at some wells, but not likely--Upwelling of bedrock groundwater near landfill; Water supply wells are generally very deep (commonly 500 feet); No selenium detected in water supply wells

<u>Investigations in Next Several Weeks</u>: Additional water supply well sampling--Confirm arsenic concentration where previously sampled only once; Expand area of sampling; Assess background arsenic concentrations using available data

<u>Possible Future Investigations/Work</u>: Deep bedrock drilling--Assess groundwater flow directions in deep bedrock; Collect information on water quality changes with depth, incl. arsenic; Cover seep areas with soil; Town to address remedy for water supplies if studies show landfill has impacted water supplies above background conditions

<u>Long-Term Groundwater Monitoring and Use Restrictions</u>: Groundwater quality in vicinity of landfill will be monitored long-term under a Groundwater Management Permit; Monitoring will enable Town to address potential problems should groundwater quality change for worse; Use of the landfill property will be restricted to protect public health.

Ms. Nichols' presentation was followed by brief remarks by Bernie Lucey, Senior Engineer in the NH DES Water Division. Mr. Lucey said 22 years ago, he was walking around higher elevation areas in Hudson, including this area, collecting water samples from private homes as part of their initial recognition that some wells in NH had arsenic in them. This was done as part of the implementation of a Federal program requiring public water systems be tested, including Sisters of Mercy School, the Oblate Fathers, the Fairview Nursing Home, and in each of those, noticeable levels of arsenic were found, above the older health standard of 50 parts per billion. When they found that information, they thought it was the fault of the lab testing. (However, geological reports show that arsenic was present in the 1800's.) There were many meetings, with great concern relative to people who owned homes in outlying areas. A young child ended up getting very ill because dry formula was mixed with drinking water from a well that had high levels of arsenic. All of the testing data has been provided to this investigatory team. In the last 20 years, EPA has recognized that arsenic has a heavy toxic effect and of some harm to people's health. Recently, EPA has changed the health standard for arsenic in

public water supplies and has dropped the standard from 50 parts per billion to 10 parts per billion. That lower number will become effective in NH in 2004 and public water systems will have to meet that standard in 2006. Based on a State-wide average, about 2% of the almost exclusively bedrock wells, were above the previous standard of 50 parts per billion. With the new standard of 10, about 13% will be above the standard. The principal concern is ingestion of water, not bathing. A point of use treatment process is adequate to remove arsenic from drinking water, and costs from \$500 to \$1,000. Some of the treatment technologies that work relative to arsenic would be to pass the water through a reverse osmosis point of use system; through absorbed media; distillation, although it's not widely used in the State; and water softening. The State's lab is available for water testing. For arsenic alone, it's \$10. They are prepared to help the Town with this State-wide problem, which has been around for a long time.

John Regan, Geologist and Supervisor for NH DES Safe Site Section, Waste Management Division said he and John Splendor, Civil Engineer, work on cleaning up contaminated sites.

(Start Tape 1, Second Side)

The landfill has been closed for a long period of time. There were wells on an adjoining piece of property where EPA had done a cleanup in the 80's. He and John Splendore have been checking their data bases of sites and started to raise the issue that these sites needed to be investigated. There are two sites side by side that contain different types of contaminants and both have made substantial progress. (He used a visual map as he spoke.) They are working with the Town and their consultant for a groundwater management permit. They delineate the area of contamination and monitor that over time. That area would also need some restrictions to keep people from digging it up.

Dana Casko, 28 Burns Hill Road asked about monitoring properties. (He moved away from the microphone to point at areas on the map and his remarks were not discernable.) Mr. Splendor, also using the map, said there are monitoring wells on that site. They recently issued a groundwater management permit to the owners of that site. Their consultants did a study about 2½ years ago and found organic chemicals where the drums were, but down near Myers Swamp, it drops down--but it is still a little above their standard. Additional remarks were not discernable because people were standing at the map as they were discussion the issue. Chairman Cole reminded speakers to use the microphone in order to be heard by everyone in the room.

Someone asked if the Town requires outside contractors to get a permit in order to drill wells. Mr. Desmarais said the Town does not permit for wells. Mr. Regan said all drillers are licensed by the State and they are required to submit certain records when they drill wells. Mr. Casko said his well was drilled four years ago, at which time the house was taken off Town water. It was common knowledge in Town that there were high levels of arsenic in the groundwater and he wondered if contractors were aware of that fact, adding that there should be some restrictions in reference to drilling wells in Town. Mr. Regan said the Town was looking at what was caused by the landfill, not at the arsenic. Mr. Casko said if there was knowledge that there were high levels of arsenic, there should be some controls in place so that more damage isn't done, with more people getting exposed. Mr. Regan said the State recently put together a private well sampling initiative, which urges people to sample various things. The State doesn't have unlimited resources, but that information is available. When people are buying or refinancing a home, it makes good sense to do comprehensive sampling.

Mr. Casko said surface runoff can get into an aquifer through fissures in the bedrock if there is drilling, blasting and natural heaving in the earth. He asked how they can exclude bedrock from surface contamination. Mr. Regan said the water that recharges wells comes from precipitation, so they want water to get into the cracks. What they don't want is water to come down the well casing off driveways, and there should be construction techniques that the driller follows to prevent surface water from flooding down the casing, carrying surface contaminants with it. Mr. Casko said there wasn't any way to inhibit leachate from getting into deep aquifers in bedrock. If there is blasting in the area, that would allow further fissuring of the bedrock and more potential for deep well contamination. Steve Lamb said the preliminary information they collected suggests the groundwater in the bedrock flows up in the area of the landfill. That is the way nature keeps the leachate from going down into the bedrock. Mr. Regan said in the higher areas the water would recharge the bedrock and from the preliminary work done by GZA, it looks like water in the bedrock is starting to discharge to the (not discernable). That means water beneath the landfill should stay relatively shallow versus if you were higher up in a recharge area.

Selectman Seabury asked Mr. Casko why he went off Town water. Mr. Casko said the previous owner of the house got a deal. He thought the Town should issue permits for drilling, based on the history. Selectman Seabury said the Planning Board, at one time, thought about having developers take samples of the water and if there was a problem, they would be responsible for putting in a purifying system. She didn't know what happened to that idea. That's the only thing they could possibly do, as this is so widespread.

James Stafford-Rogers, 87 Burns Hill Road, (Block 35-5), asked if the old landfill was properly capped and if it has a liner. Mr. Desmarais said there is no liner for the landfill. It is capped with two feet of soil. Mr. Regan said it was capped consistent with the requirements at the time. Mr. Stafford-Rogers said rain water can percolate through the non-capped landfill. He asked if the wells were tested after the landfill was closed. Mr. Nichols said yes. Mr. Stafford-Rogers said they don't know if that contamination was there prior to the testing. Only one single row of testing wells was put in around the site, so they do not know which way the leachate or contamination may be flowing, or how far it has progressed. Ms. Nichols' said they have gathered a lot of quality information at the wells. The only contaminants that showed up was arsenic in two wells and selenium (further remarks not discernable). Mr. Stafford-Rodgers' concern was that only one line of testing wells was put in and they don't know if it up-flowed across the street. It might have migrated off of the site. Ms. Nichols said they tested the deep water supply wells. Mr. Regan said they know there are exceedances at the property line. A groundwater management zone, which is the area where contamination goes, still needs to

be defined. The desire was to sample nearby homes and provide the information to the homeowners. The process of delineating the flume is not done yet. They have seen with some landfills that are synthetically capped, such as West Road, the arsenic levels have increased. They are not going to dig up the landfill, but based on their experience, those caps are very effective when there are other contaminates. Putting a cap over it now might not address the arsenic, which may be due to other geochemicals. Mr. Stafford-Rogers said but it might help. He was involved in the closure of a very large landfill in Massachusetts. They had to recap areas which had been covered and that stopped a majority of the leachate outflow.

Fred Brough, 75 Burns Hill Road, asked about the depth of the test wells. Ms. Nichols said they are 1,500 feet. Mr. Brough asked if the Bush administration was trying to keep the .05. Mr. Lucey said the Bush administration ultimately agreed with the number the Clinton administration had intended to finalize. The new standard for public drinking water systems is 10 parts per billion. Mr. Brough asked if there was any arsenic in the Hudson drinking water. Mr. Desmarais said yes, but it is less than five parts per billion, less than half of the new standard. Mr. Brough asked, other than the incident of the baby, if there were any other cases of arsenic poisoning in the State of NH in drinking water. Mr. Gordon said not that he knew of. The rest of his remarks were not discernable.

Garry Clarke-Pounder, 4 Mark Street, said his comments were directed to the Selectmen and Town Administrator. There is an undesirable level of arsenic in the water in their homes. He asked what he has to do to have desirable drinking water and how long that will take before that occurs. Town water is available nearby his house and he wondered when it would be made available to him. There is no way to solve the problem, other than bringing municipal water to the homes of the people in the area. They don't want to place blame or find out how it occurred. They want to know when the process was going to begin to solve the problem and when the problem would be solved completely.

Chairman Cole asked when the next round of testing was going to be done. Mr. Clarke-Pounder asked what another round of testing was going to do. This problem has been in the area a long time. He wanted to know what was being done today to solve the problem, i.e., getting Town water to the people who have undesirable levels of arsenic in their water that could cause cancer to those drinking it. He wanted to know when Town water will be brought to them. Chairman Cole said he doesn't have that answer. The process has already started with regard to the option of bringing Town water to the residents in that area, but it's in the preliminary stages. They don't have anything on the books to bring Town water out there right now. Mr. Clarke-Pounder asked if anything has been done to consider the feasibility of bringing Town water to them. He is looking for a timetable of when it is going to be finished.

(Start Tape 2, Side A)

Selectman Jasper said the Board of Selectmen only recently became aware of this problem. Letters have been sent out, advising residents not to drink the water. Based on the evidence they have, this problem exists in many locations. The Town of Hudson isn't going to solve all of them. If there is an area where there is a large concentration of homes that have this problem, bringing in drinking water may be the solution. However, they would have to determine how many people would want to participate. If the majority of homes don't want to hook up, the Town isn't going to burden the other water users in Town just to hook up ten homes, particularly if it is determined that the problem isn't related to the landfill. In the meantime, residents can put in filtration systems and drink bottled water. The Board will progress as quickly as they can to make a determination of what the solution is. The residents cannot reasonably expect a solution in a three week period of time.

Mr. Clarke-Pounder didn't want to give the impression he wanted a solution today. In fact, he appreciates this forum, but he wanted to leave with some sort of a time-table and cost for solving the problem. They aren't blaming the Town; they are looking for a time when the solution will start. The indisputable fact is they have arsenic in their water and that problem needs to be solved. Selectman Jasper said the Selectmen understand that but there are a lot of people in Town with the same problem and they won't be able to extend the water main in all of the cases. Ultimately, people are going to have to be responsible for their own drinking water and to mitigate those circumstances. The Selectmen have taken the first stop to find out what the concerns are by holding tonight's public hearing. They haven't been over this information in this depth before. They are working on developing the cost for extending the water mains as quickly as they can because they understand the concerns. It's not feasible to think they will have the water lines out there next week. Mr. Clarke-Pounder said that was the answer he was looking for.

Michelle McNeil, 16 Mark Street, said no one from the Town ever told her not to drink the water. Because of her neighbors' problem, she had her water tested. Chairman Cole asked when she realized there was a problem. Mr. Clarke-Pounder said he called her. He received the letter from GZA on March 5, and called Mr. Gordon on that day, who advised them not to drink the water and gave him information on arsenic, including web sites. He called his neighbors to let them know about the problem so they could stop drinking the water, too. He then received a letter from the Town on April 8.

Chairman Cole said the purpose of the public hearing has to do with solving the problem. With regard to bringing water to that area and other remedies, his point about the continuing testing, and what that would show in the long run, would be part of the parameters of any possible solution. Mr. Clarke-Pounder said continuing testing won't change the fact there is arsenic in the water. Chairman Cole wasn't suggesting that the process will become the end.

Robin Carito, 89 Burns Hill Road, said she never received a letter. She knew about the testing because she saw a notice for this hearing in the HLN. The Town doesn't have a problem cashing her check to pay her taxes, but does have a problem in notifying her that there is a public hearing

regarding arsenic in the water. Only a certain group of people got letters. She wondered if there was arsenic in the water when her house was built three years ago. She will have the water tested. There should be some stipulation on wells when houses are built. She needed to get a permit when they built a shed, but nothing for wells. How long does the Town want the residents to wait before they do something? She's not active in Town politics, but she does get a laugh out of watching the Selectmen on t.v. Arsenic in their water is a serious problem for them and they don't want to wait 80 years until this is settled. If the Town needs to bring water to them, that's what the Town should do. They shouldn't wait for more testing because it will just keep telling them the same thing.

Mr. Sharon said the well at #79 was tested and they found elevated arsenic levels, but nothing at 81, 85, or at 88, right across the street from her. Ms. Carito's well was father away from all of the testing and none of the wells between her and the landfill showed any trace. Someone from the audience said that wasn't true. Mr. Sharon said he didn't do the testing; he was just reading the chart, adding that 85 was .0119. Someone from the audience said 79 Burns Hill came in very high. Mr. Sharon said 79 is the only one in that stretch that is marked in yellow.

Jim LaFlamme, 81 Burns Hill Road, said when he moved into his house, he had a concern about the arsenic. In 1998, he had an independent test done and his well came in at .032 for arsenic. When the Town tested four years later, the reading came in at .0199 half the level tested at when he first moved in. However, when he woke up on Monday morning, he water was rendered useless, a problem he didn't have Sunday night. He presented a bottle of water to the Selectmen, asking them to smell it and, if they were really bold, to taste it. (Chairman Cole did, saying it tasted a little salty.) Mr. LaFlamme thinks the problem may bigger than just arsenic. He has a brand new house and water that is only good for watering his lawn. He can't use it for laundry, cooking, bathing or drinking. There is something wrong with the water and he doesn't know what it is.

Selectman Jasper said it wasn't advisable for people to sit back and wait for the Town to find a solution. If the Town caused the problem, ultimately the Town will solve the problem. He wouldn't be sitting around waiting for the Town of Hudson to solve his problem that he felt posed an eminent health risk. That might mean getting bottled water. It is not the job or responsibility of government to fix every well in Town. This hearing is to find out what the Town can do to help the residents with the problem. The primary responsibility as parents is to their children, not to wait for government to do it. That is a big problem in society today, in his opinion. If they find arsenic is a huge problem in that area, and they can solve it by bringing in a water line, fine, but there are going to be people in other parts of Town where that won't work because there is only so much ability. This area may be lucky in that regard, but other people may have just as serious a problem that the Town won't be able to do anything about because of the location. He takes affront with people asking what the Town is going to do for them and how soon will it be done because parents have to take care of their own families.

Mrs. Carito was sorry he missed her point. Her children are important to her. She wondered why she did not get a letter from the Town, alerting her to the problem, since the Town knew about it. If she pays her taxes, she should get a letter saying there is a problem on her street. She takes care of her children; she will give them bottled water; she will do whatever she has to, but she did not receive a letter from the Town, who did not care about her as a taxpayer and did not care about her family.

Mr. Desmarais said the sampling wasn't done by favoritism. They started at the landfill and selected the easiest source for them to sample, which was drinking water wells surrounding the landfill. They found that some of them had elevated arsenic levels, but no manganese or selenium, so they want out another tier and sampled those wells to see if they could detect a pattern. That's the point they are at now. The next step is to go further out. When they realized there was high arsenic, it was determined that the people should be notified, and that is the reason for the public hearing. There is no secret. The Selectmen acted on this as soon as they heard about it. It was advertised in the papers and Coleman ran it on Cable TV. (General discussion ensued, with people talking back and forth and over each other.) Mr. Clarke-Pounder didn't want Selectman Jasper to think they wanted the Town to solve their problem. As soon as they got the letter, they stopped drinking the water. They aren't looking for anyone to solve that problem. What they are looking for is a solution to the problem. Somebody has to address how they are going to get water without arsenic to the people.

Selectman Jasper said they can't just decide to extend the water line. It's not that simple. They have to go through a budgetary process. As owners of the water system, they would have to work on the process. They expect it would be the same as extending the sewer line, as they are doing in the Glen Drive area, just over the hill. That is going to be a sewer assessment district, paid for by the users, with some help by the rest of the system. There will be a cost to everyone, but actual construction may not happen until 2003. In the interim, the residents will have to be on bottled water. If 60% of the people choose to stay on bottled water, it won't be economically feasible to do the project. The Town probably didn't cause the problem. That landfill has been closed for 25 years and they are hearing from the experts that this problem is all over.

An unidentified speaker said there should be a moratorium on well drilling in Hudson. Selectman Jasper said they don't have the statutory authority to do that. In the sewer system, there is a law that says if you are within 100' of a sewer line, you have to hook up and the Town has to enforce that. No one *has* to be hooked up to water. Residents have the option to be hooked up to a private well, even if the water line runs right by the door. An unidentified speaker said that wasn't very pro-active. Selectman Jasper said they have to operate within the law. What they can do, and what should have been done 20 years ago, when a well is drilled for a new home, as a condition of occupancy, they can make sure the water is drinkable. If someone wants to put in a well and they already have an occupancy permit, they can only regulate that as part of the occupancy process. He assured the residents that the Town is going to work on that as quickly as they can.

Tim Sullivan, 85 Burns Hill Road, didn't think any of them were looking to government to entirely solve the problem. They can continue drinking

bottled water, put in their own water filtration systems, or wait to hook up to Town water. He asked what the timetable was for that plan to be established. He has a neighbor with extremely high arsenic levels, which is about 150' from his well. He asked if it was common to see such disparity in numbers. All of the wells are about 500' deep. Nancy Nichols said Mother Nature didn't see a big difference between .01 and .09. If someone is concerned about their levels, they should monitor their water. (Additional remarks were not discernable.)

(Start Tape 2, Second Side)

Chairman Cole said the Town just found out the severity of this problem a couple of weeks ago. He asked the Town Engineer what the process was, if they had to extend the water line. Mr. Desmarais said a warrant article would have to go before the voters at the 2003 Town Meeting and funds would be available in July 2003. If everything was fast-tracked, construction might begin in the Fall of 2003 and would probably go into 2004. (Remarks not discernable.)

Bryant Beverlie, 68 Wason Road (35-6), thanked the Selectmen for this hearing. Until he read about this in the paper, he didn't realize how bad the situation was. He already has a four-tank system, just so they can use the water to do dishes and laundry. He is also considering a point of entry system. Another option is point of service, which is using the water main to the sink that goes to the ice maker and dish washer, etc. It is his understanding that boiling the water does not get rid of the arsenic. Mr. Lucey said if they boil the water for a long time, it will concentrate the arsenic rather than dilute it. Mr. Beverlie said he isn't willing to wait for the Town to do something. He doesn't think it's the Town's fault. This is his property and he is responsible for it. He and the people who spoke all live on the same block and all have similar problems with their wells. He has a two-year old daughter that is bathed every night. He asked about health risks associated with being in the water for 15, 20 minutes and if he should have a system that takes care of his whole house, as opposed to point of service. The screw-on filters last only a week before you have to change the filter. Now that he knows he has the problem, he is looking at a home filtration system. Whether it takes the Town two weeks or 20 years, that is not good enough for him. He was quoted \$1,802 for a state of the art system that removes 99.5%. He wondered why this was just coming to light now.

Mr. Gordon said there is little risk associated with bathing; very little is absorbed through the skin. The problem is ingesting it. The problem with young children bathing in it is that it often gets in their mouth. In that case, it depends on how high the concentration is and how much they like to drink.

Selectman Jasper said this goes back to when the landfill was closed, pre-1975. The Town covered the landfill over with gravel and walked away from the site. The person that owned the land that had the barrels on it was complaining that the Town had encroached onto his land. Not much happened until he died and then his heirs began an action against the Town. There was a warrant article three or four years ago for \$100,000 so they could buy the area that was contaminated. As they began the process, the family pointed out stuff coming out of the landfill, heading towards the swamp. For the most part, that is what the discoloration was. In the process of negotiations, they wanted to be sure that, beyond just the encroachment of the physical debris, that there was no pollution. That was the impetus for sinking the wells. As they began to get the results, they began to wonder if it extended, and that is what prompted the testing. They wanted to make sure that not only this piece of property was clean, but there wasn't any contamination. When they started, they weren't looking for arsenic; they were looking more for organic compounds that might be found from the landfill. That is what the started the ball rolling. The Board decided the best thing to do was get this information out as quickly as possible, and that is why they are here tonight, without having all of the pieces yet. Mr. Beverlie asked what steps the Town would take to notify the residents in the area. Chairman Cole said they would be notified by letter.

Jeannette Senko, 11 Eayers Pond Road, wondered if this problem could mushroom to a bigger problem, including the whole southern half of the Town. Mr. Lucey said he brought an informational piece on arsenic available at the back of the room, which contains a web site and on that web site is about 50 documents that are helpful to people with private wells. Document #2-1 is entitled, Suggested Water Quality Testing for Private Wells. On the second page is a listing of the contaminants that people should test for and arsenic is included. There is a cost of \$235 which may be tough for some people to handle in one lump sum. If that is the case, they could do some now and the other components at another time. In terms of whether it's the same aquifer, gravity is taking the runoff from the landfill and moving it in the most expeditious way downhill. If someone is two miles away, it is unlikely that that is going to curve in their direction. Runoff is going to be towards the river, after some local accommodations for modest changes in topography. To focus on the Burns Hill property and not recognize the other possibilities of contamination would miss the point.

Ms. Senko said she didn't have a clear understanding of the groundwater system. She assumes that everyone's well is fed by an underground water source that is fed by rainfall, etc. They don't really know how water flows underground. If there is a problem in the Burns Hill area, the potential is there for a problem in her area of Town which will probably never have Town water, even though she pays the same tax rate other people. Mr. Lucey said he would speak with her after the meeting and she could show him the location of her home. After they see the topography, they could provide a little more detail.

<u>Carmine Marinilli, 8 Mark Street</u>, asked how often he should test his water and for those of them with elevated arsenic levels, where they could go for unbiased advice on a water filtration system. His other questions were not discernable. Mr. Lucey said the documents in the back of the room contain a web site. He should go to Document #2-1, *Frequency of Repeat Testing*. The people that sell water conditioning equipment are not licensed and the products they sell are not in any way sanctioned by the State. Mr. Marinilli asked how they could get unbiased information. Mr. Lucey said there is a substantial amount of information on the internet site. Reverse osmosis is spelled out in great detail, as well as ion exchange

and others. Document 2-5 puts forth a number of considerations relative to the purchasing of water equipment, warranties, etc. He wouldn't offer any brand names, but he would help to improve their evaluation skills so they can make a wise decision. He offered to talk with Mr. Marinilli after the public hearing. Mr. Marinilli asked if everyone would vote on extending the water main. Chairman Cole said the article would be on the Town Warrant, which would be voted on by the whole Town. Selectman Jasper said it was his opinion that before they got to the point of putting in a warrant article, he would want to hold a another hearing with input from the residents, once they knew the cost. It would be foolish to come forth with a warrant article upwards of \$1 million and then have the residents of the area campaign against it.

Frank Giuffrida, property owner of 102 and 108 Wason Road asked if a home system would take care of the arsenic and other things in the water so that they wouldn't have to worry about drinking it, brushing their teeth, bathing or doing their laundry. Mr. Lucey said before buying anything substantive, he would look at the 2-1 document and make sure that much of the testing that is on that document is done because there are other contaminants. He said to assess all documents as to the health risk and how much of the stuff there is and then, based on budget capabilities, start working from the highest contaminates. Mr. Giuffrida wanted to know what he can do to make his tenants feel safe with drinking their water. Mr. Lucey said he should go to the water conditioning industry, explain his problem and give them a copy of his lab data sheet that quantifies what the problem is and define what he wants for a solution and then the water experts can tell him what he needs and what it is going to cost.

(Start Tape 3, Side A)

Mr. Stafford-Rogers asked if there is anything else from the landfill that will be tested for. Asbestos was put in there. He wondered if they should be testing for something else that hasn't been mentioned yet. Chairman Cole said he didn't think anyone present could answer that. Lisa Riley said she has lived in Hudson her whole life and on Saturday mornings, she would go with her Dad to the dump and often they brought more home than they took. The dump was just folks bringing their household waste, table scraps, washing machines, broken lamps, etc. She didn't think there was any serious dumping there.

Mr. Clarke-Pounder asked how much it would cost the Town if it is determined that the landfill is the source of the problem. Chairman Cole said they have no idea of what the cost would be. Selectman Jasper said if the State ordered the landfill be capped, it could run into the millions and still not solve the problem. The solution might be to hook everyone up to Town water. The Town Engineer put out a figure of \$950,000 but it's a number he can't be held to. When they capped the West Road Landfill, there were a flume that only went so far. The further out it gets, the more diluted it gets. The flume is gradually moving back. Mr. Clarke-Pounder said if that happens and the runoff is no longer being consumed, will there be any obligation to surrounding towns or any other financial obligations regarding the landfill? Selectman Jasper said the flume only goes so far, so they have to establish where that ends.

Mr. Beverlie said there is a reverse osmosis machine located on the side of Haffner's Car Wash. A contractor recommended that he try that. The water was tested and came back as exceptionally good water. It's \$.25 for a gallon or \$1.00 for a five gallon tank. He's been using that for two years and he recommended it for people to find out what pure water tastes like.

Mr. Giuffrida's asked if they were going to get reimbursed for the water they have to buy, the filters, etc. Attorney Ratigan said in the letter that the Selectmen sent out, it stated that if the Town is ultimately found responsible, they would reimburse the residents for bottled water, not for systems, so they should save their receipts.

There being no further questions or comments, Chairman Cole thanked the State for coming to this public hearing, as well as GZA, Attorney Ratigan, Town staff, Board members and, most of all, the residents. He assumed that some of the residents had their own tests done of their systems, over and above what the Town did. He asked those residents, if possible, to leave a copy of the test with Nancy Nichols or, if they didn't have it with them, to drop off or mail a copy to the Town Engineer at Town Hall.

Chairman Cole closed the Public Hearing at 9:10 p.m.

Recorded and transcribed by Priscilla Boisvert Executive Assistant
HUDSON BOARD OF SELECTMEN
William P. Cole, Chairman
Shawn N. Jasper

Lisa A. Riley