

STATE ENVIRONMENTAL COMMISSION
Meeting of February 15, 2001
Commission on Tourism
Carson City, Nevada
Minutes

MEMBERS PRESENT:

Melvin Close, Chairman
Alan Coyner, Vice Chairman
Terry Crawford
Demar Dahl
Fred Gifford
Paul Iverson
Joseph L. Johnson
Hugh Ricci
Steve Robinson
Joey A. Villaflor

MEMBERS ABSENT:

Mark Doppe

Staff Present:

Deputy Attorney General Susan Gray - Deputy Attorney General
David Cowperthwaite - Executive Secretary
Sheri Gregory - Recording Secretary

Chairman Close called the meeting to order. He noted that the meeting had been properly noticed in compliance with the Nevada Open Meeting Law.

Agenda Item I. Approval of minutes from the December 5, 2000 meeting.

Commissioner Johnson moved for acceptance of the minutes.

Commissioner Crawford seconded the motion.

The motion carried unanimously.

Agenda Item II. Introduction of newly appointed Commissioner Steve Robinson.

Chairman Close introduced and welcomed Commissioner Robinson. He then asked staff about the items that had been removed from the agenda.

Allen Biaggi introduced himself as the administrator of the Nevada Division of Environmental Protection. He explained Petition 2000-12 and Petition 2001-05, which related to the air quality programs, have been removed from the agenda. This is based upon some concerns we had with consistency of those regulations as a result of the continuing ongoing deregulation and power generation issues. We're going to work those regulations around a little bit to make sure that there are no conflicts. There are also some concerns with regard to those regulations, which the mining industry has expressed, that cause us to pull those at this time. Mr. Iverson and our office have been working very closely from an agricultural perspective and I appreciate the opportunity that he has made to have our staffs discuss these issues and hopefully we can resolve them from an agricultural perspective. But we don't feel it's prudent to go forward with those at this time.

Chairman Close moved to **Agenda Item III. Regulatory Petitions**

(Petition 2000-10 (LCB R-104-00)) is a permanent amendment to NAC 445A.119 to 445A.225, the water pollution control standards for water quality. The amendment adds new water quality standards and beneficial uses for Walker Lake and amends the standards for various reaches of the East and West forks of the Walker River. A new control point is proposed to be added on the east Walker River at Bridge B-1475 at the state line with California. Amendments are proposed for NAC 445A.159 to 445A.169, inclusive including Sweetwater Creek and Desert Creek of the Walker River. Amendments vary for each reach defined above, but include: temperature, pH, total phosphates, nitrogen species as N, Dissolved Oxygen, suspended solids, turbidity, color, total dissolved solids, chloride, sulfate, the sodium adsorption ratio, alkalinity and Escherichia coli. It is proposed to revise the time period that adult Lahontan cutthroat trout may be present in the reach from Walker Lake to Weber Reservoir. (Note: This petition is being continued from the December 5, 2000 meeting of the Environmental Commission.)

Chairman Close stated the other day I noticed in the newspaper that there was a Supreme Court hearing relative to Walker River. I wasn't really aware of it. I think it's appropriate for us to be aware of what's going on relative to that matter. He announced that Paul Taggart from the AG's office was present and that he was one of the persons who represented the AG's office. He asked Mr. Taggart to give an overview regarding the litigation.

Paul Taggart introduced himself as Deputy Attorney General for the State of Nevada. He stated I did represent the State Engineer and the Director of the Department of Conservation and Natural Resources last week in a case involving Walker Lake. These comments are purely informational. There was a request from Mineral County to have the State Supreme Court issue a writ against the State Engineer and the Director of Conservation and Natural Resources. The writ is a mandamus action. It would order a State official to take action that State official is allegedly not taking. Mineral County argued that the State Engineer was obligated by law to cut back upstream diversions so that water could be made available to Walker Lake so that TDS levels could be improved and so the health of the lake could basically be improved. We argued that the State Engineer is unauthorized to do that by law. There were a lot of ancillary arguments that we made as well. The primary issue that came up was the Public Trust Doctrine. This a doctrine that was argued in California with respect to Mono Lake in the '80's and it's been argued in a number of other states as well. The issue that was posed to the court was whether or not this doctrine would allow the State Engineer to cut back upstream diversions to help Walker Lake. We argued the State Engineer is not authorized to do that. The State Engineer can only do what the statutes allow him to do and the statutes don't direct him to do what Mineral County was asking him to do. Mineral County argued, on the other hand, that the Public Trust Doctrine not only authorizes, but obligates the State Engineer to take this action to help Walker Lake.

Chairman Close stated there's also a federal court action that is pending. He asked Mr. Taggart to give a brief overview.

Mr. Taggart explained the Walker River was adjudicated by a federal court in the 1930's. It was the basis of a long process through which all of the ownership rights in the river were established at least up until that date. It was done pursuant to a federal court action that was filed by the United States Government back in the early part of the last century. Based upon the water law in this State and in the western states, a court that enters a decree like that, which basically defines all the water rights, holds jurisdiction over the river system into the future to implement the decree and to implement the ownership. Generally, water commissioners work for the court and distribute water on the river system pursuant to the decree. That's been going on since the early '30's. In the last couple of decades the federal government has asked that court to change part of the adjudication to increase the amount of water available to federal

reservations and to an Indian reservation. So, there's a lot of activity in the federal court with respect to the Walker River. As part of that activity, Mineral County asked for similar relief from the federal court back in 1995, again, through this public trust doctrine concept. Currently, in the service process if you file a complaint you have to serve everyone. They are in the process of doing that. So, the court hasn't had the opportunity to really consider the Public Trust Doctrine or the merits of that doctrine. But that issue is before the federal court as well and one of the arguments we made to the State Supreme Court is that the federal court has this case before it and it has jurisdiction over all of the water rights in the river, including California water rights, federal water rights, and Indian water rights. For that reason, the federal court is the best court to decide how to deal with the situation.

Chairman Close asked in the event the Walker Lake people are successful, will that reallocate water from Walker River to Walker Lake? That's what they're asking for I presume?

Mr. Taggart answered that's the goal. Their argument is that the reason the lake is in trouble is because it doesn't have enough water in flowing every year. They're asking for the court to order the State Engineer to force more water into the lake however he can find it.

Chairman Close called for questions. There were none. He then opened the meeting for continuation of the Walker Lake public presentations. He noted that the majority of the presentations regarding the Walker River had already been given at the last hearing, but would allow for more during the meeting. He stated that he wanted to make sure that the people from Hawthorne, Mineral County, had an opportunity to give their full presentations. He called upon Steve Fulstone.

Steve Fulstone introduced himself as a rancher, a resident of Smith Valley, water right owner, fifth generation Nevadan, and a WRID board member. He stated our legal counsel is going to give a little bit more in-depth presentation. I wanted to kind of give a perspective from a rancher. I'd like to emphasize the impacts of your decision. The ranching community is probably worth about a half a billion dollars. This decision today could affect that investment of property that these ranchers have. We generate approximately \$60 million a year revenue for the State. We generate approximately 20 percent of the agricultural products in Nevada. The Commission should not set standards that will severely impact this agricultural community. How will you meet these standards that you set? You should know before you set standards that they will be obtainable without severe impacts on the agricultural community. Why should we set standards that cannot be met even today? These proposed standards proposed today are unrealistic. The proposed standards are based on a conceptual idea of reintroduced spawning law in cutthroat trout. They are not there now. Why are you going to set standards based on some conceptual idea that the Fish and Wildlife have about reintroducing Lahontan cutthroat trout? Let's set standards for existing fisheries, not for hypotheticals. Your decision today could set the seeds to change existing federal adjudicated water rights and bankrupt an agricultural community. So please weigh heavily on the ramifications of your decisions today.

Chairman Close called for questions. There were none. He called upon Louis Thompson. There was an inaudible response from the audience. He then called upon Jean Baldrige and Gordon DePaoli.

Gordon DePaoli stated we're second comers. You've already called us.

Chairman Close called upon Joseph Warburton.

Joseph Warburton introduced himself as Executive Director Emeritus of the Atmospheric Sciences center of the

Desert Research Institute and a resident of the Yerington area. He stated I attended the previous meeting in Yerington of this Commission. I noticed there was one particular point on the diagram that was presented showing the TDS concentrations in Walker Lake. One of these points was an extremely low point of 9,000 ppm and I believe that is a spurious point in the diagram and perhaps the Department might like to take a look at that. The reason I believe it's spurious is that there was no corresponding increase in the elevation of the lake and, therefore, it's volume to account for such a decrease in the observed value at the harbor point that they make the measurement. So I believe you shouldn't put any reliance at all on that particular point of the diagram.

The main purpose that I'm here for this morning is to point out to you that I've just participated in a National Academy of Sciences workshop in Washington, D.C. discussing new opportunities in weather research for providing sustainable water resources. My involvement in that was dealing with snowpack augmentation in watersheds in the western United States. It has been clearly demonstrated and documented in the literature that there's a direct connection between seeding with silver iodide aerosols and the production of snow on the ground. The amount of snow that can be produced is approximately between .3 and 1 millimeter of water per hour of use of one seeding generator. If you translate that into a watershed such as the Walker River catchment area, above 6,000 feet, which is the snow level you have an area of at least 1,200 square miles which could be suitably treated for augmentation of snow. Some of that work is already going on by the Desert Research Institute, but the amount of activity that they have is relatively small in the Walker River catchment. They are only seeding approximately 10 percent to 15 percent of the available area. The reason is that there's insufficient resources and equipment to treat the rest of the area.

I've estimated that if the new technologies that are now available to you, this is a 50-page document that we produced for the National Academy of Sciences and there are sections in here on the snowpack augmentation section of it. It dealt with a lot of other subjects such as rain and hail and tornadoes and hurricanes and so on. My estimation is that if you adequately instrument the area of the Walker River catchment using the current technologies that are available, you can produce in excess of 100,000 acre feet of additional water for that catchment area.

Commissioner Johnson asked could we ask you to introduce that document into evidence here?

Mr. Warburton answered it's in the public domain and copies of it can be made available to you. It deals with a lot of other subjects other than snowpack augmentation. Are you referring to just the snowpack section or all of the other sections?

Commissioner Johnson stated I think for purposes of this hearing, just those portions relevant to snowpack augmentation. But I would move that we accept the portion of that document that pertains to snowpack augmentation into the record.

Chairman Close asked are you able to give us that portion of your draft?

Mr. Warburton answered yes, I can do that.

Chairman Close stated if there's no objection we will include that as part of our record. He called for further questions.

Commissioner Gifford asked what would be the estimated cost per acre foot of the instrumentation and the seeding process of those 100,000 acre feet?

Mr. Warburton answered the most recent Desert Research Institute report to the Walker River Irrigation District, I believe they provide them with a report each year, is approximately \$7 per acre foot cost of production. That's been well documented in Utah, Arizona, Nevada, North Dakota, South Dakota and other states where this work is going on.

Commissioner Ricci asked in this report that you talk about here, is there a funding mechanism if this is approved to go on to have augmentation wherever it may occur?

Mr. Warburton answered it's possible. This particular report was produced by the scientific community for the National Academy of Sciences. The director of the National Oceanic and Atmospheric Administration, Dr. Baker, who was in attendance at that meeting, has now funded the National Research Council's follow-up report on this report which will go to the presidential science advisor and to the Congress. That's currently being prepared. We are expecting that the agencies of NOAA, possibly agriculture, reclamation, maybe one or two of the other agencies may very well put funding into their budgets shortly to support these programs and the National Science Foundation as well. So there is a possibility that funding, matching funds preferably, might be made available from the federal agencies for this kind of work. As you probably already know, the State of Nevada already supports this activity in several watersheds of the State, including the Walker River. But they're very limited in the number of seeding units that are available for them. I believe in the Walker catchment area there are only five, whereas they really need about 30 all together to cover the whole area.

Chairman Close called for further questions.

Commissioner Gifford asked the 100,000 acre feet figure, that you give, is that for a normal year? Is that what you're projecting for? Or is that an exceptional year, or bad year?

Mr. Warburton answered that was based on what I considered to be a minimal year. The number of hours that you can perform these activities in the catchment area such as that of the Walker River is between 150 and 200 hours of activity for each of these seeding units per winter season. Two hundred hours is a good winter season and 150 hours is a minimal winter season. My numbers were based upon the 150-hour figure. So, the potential is there for even, perhaps even larger amounts than I mentioned. I was trying to be very conservative on the numbers.

Chairman Close asked if I start seeding the area over my property, am I not taking water from some other location? If the Walker River area is seeded, somebody adjacent to the Walker River area is not going to get potentially rainfall. How does that work?

Mr. Warburton explained there is a long history of investigations that have gone on in relation to what's known as the downwind effects of seeding activities. There is no scientific evidence that's ever been presented which establishes that increasing the precipitation in an area such as the Walker River catchment would deplete the precipitation in downwind areas. See the increases that you're producing are very small per hour of activity. You're only putting down on the order of a third of a millimeter of water per hour, you know, of activity. So, during the season you're putting down about 6 inches to maybe 9 inches of total water onto the surface. To be able to detect a change downwind of there is extremely difficult. No one has ever succeeded in doing that.

Commissioner Gifford asked have you actually conducted studies in Nevada in the Sierra Nevadas in terms of what your cloud seeding is actually doing? I mean good, sound statistical studies?

Mr. Warburton answered yes sir and it's documented in this Academy of Sciences Report.

Chairman Close called for further questions. There were none. He called upon William Schaeffer. Someone from the audience spoke, but it was inaudible. Then he called upon Louis Thompson.

Louis Thompson introduced himself as being with the Walker Lake Working Group. He stated as I've sat here today I got to feeling wondering if I'm just paranoid or if most of the offices and commissions in the State of Nevada are against Mineral County in this issue. We weren't aware that more public input would be allowed in the form of new testimony at this meeting. We were under the impression that the time for public input had elapsed. Therefore, we did not prepare additional materials. We get to feeling a little bit discouraged, I guess, going to the meetings first in Yerington and then here in Carson City where we've doubled the travel time and distance for the residents of Mineral County most of whom are unable to attend meetings of this kind at this time. We find it difficult to believe that rational people would argue against setting standards that would preserve a valuable resource for the State of Nevada and Mineral County particularly. The lake is a very viable recreation area and fishery that belong to all of the people of the State of Nevada and is a particularly valuable economic resource for Mineral County. Such arguments against setting standards that would preserve this ecosystem and this fishery are essentially arguments against letting the lake survive as a viable ecosystem and essentially arguing for the collapse of the fishery and the lake as we know it today. We believe this would be an unacceptable loss to the people of Nevada and to Mineral County.

Chairman Close stated I might mention to you that at our last meeting that we did continue the hearing. We made no decisions, and one of the reasons that we had the continued hearing, as a matter of fact, was to allow people from the Hawthorne area to participate more fully. We understood that going up to Yerington was a difficult thing being a long way away and for that reason we had a second hearing and my understanding was that there would be an opportunity for people who had not testified before to testify again. Surely we are prepared at this point to take additional testimony. You've already made a very thorough, careful presentation as I recall at the last hearing. But if you have anything else to add, we're surely prepared to listen to it. I can assure you that there's no array of an intent to deprive the people from Hawthorne and Mineral County to testify.

Mr. Thompson stated I'm certain that is true. We just get to feeling paranoid I guess because of the circumstances that we keep facing.

Chairman Close stated I understand that.

Mr. Thompson stated we were not aware of the opportunity to present more new testimony at this time. So we're not prepared to do so.

Commissioner Johnson asked will you reiterate some of the economic impacts in the community of the loss of the fishery at the lake?

Mr. Thompson answered the lake produces approximately 40 percent of the income for Mineral County in the form of tourism, the fishery, recreation and so forth associated with the lake. It's a major, probably the major contributor in Mineral County.

Chairman Close called for further questions. There were none. He called upon William Schaeffer.

William Schaeffer introduced himself as an attorney representing Dynamic Action on Wells Group. He stated in my previous remarks to the Commission in Yerington in December of last year, I first noted the Commission's statutory duties relative to setting water quality standards for Walker Lake. I then outlined some of the potential problems that could occur and the possible effects of setting a standard which would immediately require more inflows than are presently possible given current water appropriations upstream. My purpose in addressing you again is not only to reemphasize those considerations, but also to rebut some of the comments made after I finished my remarks.

First and foremost, it is the legal position of the Dynamic Action on Wells Group commonly known as DAWG by its letters "D A W G" that this Commission is without lawful authority to set water quality standards at all unless those standards can reasonably be met and maintained. I tried to make this point clear with the recitation of statutory law at the beginning of my previous address. Put another way, if water quality standards cannot reasonably be met and maintained, then this Commission may not set them. This is a jurisdictional issue. Therefore, before setting standards, the Environmental Commission must first find that a standard which allows for the long-term propagation of fish and wildlife can be reasonably met and maintained. Consequently, if this Commission chooses to set standards for Walker Lake, then we respectfully request that the Commission make and support findings which indicate how the standards can reasonably be attained and maintained. In other words, DAWG believes this is impossible. Please tell us specifically how and why we are wrong and how this geologic impossibility can be accomplished. If you cannot do so, then it is our legal position that you are duty-bound to not set any standards whatsoever.

Second, it is also DAWG's legal position that reasonably attainable means taking into account existing water rights and water uses and the potential impact upon the local communities and ecological environment in the areas where the water comes from. In this case that means that before the Commission sets a standard it must explain how that standard could be met without substantial detrimental impact upon the upstream users and upstream wildlife. Further, by upstream users we not only include the holders of the water rights but also those who make their living from those who hold the water rights. This is why I invoke the ghost of the Owens Valley. The farmers there were bought off. It was those who owned the stores, shops, restaurants and other businesses who depended upon those farmers who got hurt. That's what has DAWG concerned. Now if someone wants to go through condemnation proceedings to compensate for the loss of hundreds of jobs and buy up all of Mason Valley including Dini's Lucky Club, the Mason Valley News, Scolari's, and every other business in Yerington, then I suppose it would be acceptable to ignore the potentially disastrous indirect impact which setting standards would impose upon upstream users of the water currently appropriated to agricultural use.

However, even the condemnation of all of Mason Valley would not discharge the Commission's duty to consider the upstream wildlife. Without agriculture there are far fewer deer, mice and rabbits feeding on that agriculture. With far fewer deer, mice and rabbits there are far fewer hawks, eagles, coyotes and mountain lions feeding on those deer, mice and rabbits. When current water quality levels can only be maintained by ever increasing appropriations of water from the Walker River until the lake becomes too saline even with the full unfettered compliment of all the river's water the whole rationale for attempting to save the lake by setting standards disappears. In the end, playing things out to their logical conclusion, setting a standard, any standard, will result in the complete economic and geologic annihilation of Mason and Smith Valleys. Worse yet, the salt levels will continue to rise and the fish that such standards were designed to propagate will die off anyway.

According to the statutory law cited in my previous address, this Commission is duty-bound to consider these potential impacts before setting standards. Hereto then DAWG respectfully requests that the Commission explain how any standard they might set will not eventually have a very significant and adverse effect upon the upstream human

and ecologic communities. As before, DAWG believes this is impossible. Please tell us why we're wrong and how you think it can be done without such devastating environmental and economic impacts. One of the supporters of standards of Walker Lake suggested water rights from the Walker River and Mason Valley could be purchased or otherwise obtained as agricultural efficiencies improve. My rebuttal to this remark is to emphasize my point in the previous address that it is the agricultural inefficiencies themselves which account for the ecological diversity that exists in Mason and Smith Valleys. The wildlife refuge's success and the plethora of hawks and eagles which exist in those areas owe their existence to not only the agriculture there, but also to the water that already escapes from that agriculture. Relying on increasing efficiencies in agricultural water use would thus pose this problem. Without the small amount of escaped water they now drink or otherwise utilize, how would the upstream wildlife survive?

In passing, I would also note that such water savings would still belong to the current holders of the water rights and any attempt to "tax" them such water would require condemnation proceedings. Thus, we are back to purchasing or condemning upstream water for use in a terminal lake. Such purchases once started cannot be controlled and therefore may well lead to a repeat of the Owens Valley situation as noted above and in my previous address. At our previous meeting on this issue, more than one of the State employees speaking in favor of setting standards openly suggested that the Commission might have its decision appealed by an activist environmentalist group if the Commission fails to set a standard. We live in a new day, a new age. The era when only liberal groups would litigate is passed. Conservative groups are also litigating environmental and other public policy issues. Frankly, I think it is safe to assume that whatever decision this Commission makes on this issue that decision will be challenged in court. I would note that I was disappointed that no one from the Commission nor anyone else criticized the view that public policy decisions should be made based upon whether or not there could be further litigation. I am addressing the issue only because it was raised in favor of the opposition and therefore I feel compelled to return fire. Nevertheless, both professionally and personally I urge this Commission to base its decision on the law, on the facts and on what is best for the people of Nevada and not on who is going to sue who and for what.

Finally, a new issue has appeared since the December hearing in Yerington. David Haight of Dynamic Action on Wells Group has come up with a potential solution which he is in the process of presenting to interested persons and groups in the area around Walker Lake and the Walker River. As noted in a front page article in the February 10 edition of the Nevada Appeal, which is Volume 136 No. 271, a dam could be built over the eastern portion of Walker Lake. By not being terminal, the area within the dam would be able to meet water quality standards sufficient to allow the survival and continued propagation of many different species of fish. If, however, this Commission sets a standard, any standard, then this potential solution will be stopped before it can get started. Under the current law, any standard set would likely have to apply to the whole lake and not just part of it. Since the remainder of the lake would remain terminal, its salinity would continue to rise and therefore the standard could not be met. With no standard set at this time, the proposal could go forward as a possibly viable solution depending on cost and the availability of funds. Setting a standard would thus kill this idea before it gets started. There is nothing prohibiting this Commission from setting any standard it can set now at a future date, perhaps in a year or two. If the Commission holds off on setting a standard, it will give this proposal time to be explored. Once such a dam was constructed, the Commission could then set a standard for the area behind the dam and fishing could occur there. The area envisioned would be large enough for both on shore fishing as well as by boat. Thus, by setting an unattainable standard now the Commission could stop the only viable proposal for actually meeting the standards and goals of the Clean Water Act as applied to Walker Lake.

In closing, I would just like to reiterate what I said at the end of my last address. Contrary to the spirit of the Clean Water Act, the proposal would necessarily aid in the abrogation of existing agricultural water rights in an already

overly appropriated basin. Accordingly, the proposal would run counter to the legislative purpose of the State and federal acts the proposal was designed to implement. Until and unless the State Environmental Commission can show how the proposed standard can be met and maintained without adversely affecting upstream terrestrial wildlife, industries, economic development and agriculture, no standard should be set. Inasmuch as the supposed goal of the proposed standard is unattainable due to unalterable geologic factors, it follows that Walker Lake should have no standard and upstream water users should be left in peace. At the very least, before setting any standard, the Commission has a duty to explain how the standard is going to be attained and given the Thomas Report, how such a standard will be maintained in a terminal lake. As before, I wish to thank all of you for your time and your anticipated careful consideration of these concerns.

Commissioner Dahl asked with this plan to put in a dam do you know how big the impound area would be?

Mr. Schaeffer answered no, but Mr. Strachan is here. I believe he knows more about it than I do. He's a geologist. He helped Mr. Haight in this. I believe they had a hydrologist with them too, whose name escapes me at the moment.

Commissioner Dahl stated okay, well maybe we can find that out later. My second question is, are you aware of any studies that determine how much the diversion would have to be reduced in order to have the lake be able to meet its standards?

Mr. Schaeffer answered I don't have those right at my fingertips. I believe some of the testimony was given at the last hearing about what they were thinking. It just plain goes up. The Thomas Report gives you some idea on it. No matter what you do, because it is a terminal lake, the salt level continues to rise. But, I don't have the studies at my fingertips.

Commissioner Dahl stated it seems like last time that we were told the diversion would have to be reduced by about half if the standards were able to be met. I was just wondering if there has been a study to determine that.

Mr. Schaeffer stated beside me, for the record, is Don Strachan a geologist and maybe he can answer those questions.

Don Strachan introduced himself as a geologist and a resident of Gardnerville. He stated I used to live in Yerington. I've been in Nevada since 1980 and mostly in gold up until recently. I'm now working in both industrial minerals, gold, as well as dabbling in hydrology and hydro geology. What were your two questions?

Commissioner Dahl stated I was just curious about what the size of the impound area would be if we were to have a dam like is anticipated.

Mr. Strachan explained it's monumental but it's doable. What we're looking at is Walker Lake. I've actually got some good slides for this but they're not here. I didn't expect to be called out. This is a map put out by Rush in 1970. It shows the topography around the lake as well as the depth contours in the lake. And what we just proposed, without doing the detailed engineering, is to run a cofferdam along this portion of the lake, blocking off approximately one-third of the lake. That would impound on the saline side about, 13,000 acres over here and about 22,000 acres over here, about 12,000 acres here. The deepest portions of the cofferdam would be as high as 110 feet and it would be made up of material locally gathered that has already been actually prepared for us in the hills off to the east. There is sufficient gravel deposits that were part of the high sand of the ancient Lake Lahontan that would more than suffice to build this cofferdam several times over. So the amount of water available for fishing and for recreational use would

be about two-thirds of what is available right now.

Mr. Schaeffer stated for your information, I cited the newspaper article. I'm going to attach that with my remarks and it has kind of a map of Walker Lake showing the dam area which he just showed you there.

Mr. Strachan stated regarding the upstream question on the Walker River, our proposal would include from the Wabuska Gauge that is the outflow of Walker River from Mason Valley at Wabuska Gauge down through Schurz down to the lake. There should be a straightening, a cleanup and a maintenance of the river channel to reduce the amount of losses that are presently occurring there. There's approximately 125,000 acre feet flowing out of Mason Valley on the average every year over the past 100 years or so. The loss right now is 42 percent. That can be reduced by revising the character of the channel and maintaining it. It can be reduced significantly.

Commissioner Johnson stated it's my understanding that because of historic information the standard being set is only for the lake at Sportsman's Beach, not the entire lake, and that there was anticipated additional accumulation of data in the future to set standards in the future?

Mr. Schaeffer explained unfortunately, my understanding is due to the geology of the area, first off, without some sort of a dam set up such as Mr. Strachan has been talking about and that I refer to in the Nevada Appeal, the location of that beach, is that the one that's down by the town of Walker? I'm not sure which beach it is.

Commissioner Johnson answered (inaudible).

Mr. Schaeffer stated that is a long way from where the river comes in. I know of no easy way at all to make that area meet the standards while the rest of the lake does not.

Mr. Strachan stated once this cofferdam would be built, it would require about a year to build, but every year the two-thirds western usable portion for recreation and fishing, every year would turn over and it would become essentially homogenous. As every year passed, there would be some flow of that water, as water came in from the north other water would flow through, it would be allowed to flow through the cofferdam into the saline portion. When the spring floods quit, the gate would be shut, the two-thirds would then again be allowed to homogenize, each year it would become fresher. Then over the years we would see a very marked, according to our computer modeling, each year that lake would become fresher and fresher so that in five years I think we're looking at 10,000. In 10 years we're looking at 8,000 mg and in 100 years we're looking at 2,000 mg which is far better than Pyramid Lake. Also, you could have any kind of a fish you wanted there as long as that cofferdam is maintained and there was sufficient maintenance of the cofferdam and good regulation of it by whatever agency would be involved and I assume that would be NDOW or some other State agency.

Commissioner Johnson stated I raise this question not from the standpoint of the operation, I just see that the standard being set at Sportsman would not then automatically preclude the building of this cofferdam. I think this is an interesting proposal, but I think the standards . . .

Mr. Strachan stated if you set standards at Sportsman's Beach with the cofferdam we could meet it. But without the cofferdam all bets are off.

Commissioner Johnson stated I understand that. I think I addressed it at Mr. Schaffer originally because he said setting the standards on the lake would prevent the building of the cofferdam and I'm just saying the standards we're

setting is only for Sportsman's Beach, fully aware that the impact on long-term is both at Sportsman's and the entire

lake. This is the point that I wish to make - that simply adopting standards at Sportsman's would actually give incentive for governmental agencies to produce the money to build that cofferdam or other actions.

Mr. Schaeffer stated unless I've mistaken something, the problem with that would be fine if we were talking about the standard being set now to be implemented in five or ten years. But when you set a standard and you miss it, all sorts of triggering mechanisms go into place. Setting a standard right now would pose problems and, you know, we don't know where this idea with the dam is going to go, obviously it would have to be federal money, there's no way the State of Nevada could do something like that on its own. Not given current budget concerns, that's for sure. So, that's what we're looking at. We would have to find out what's available out there and, again, this idea just cropped up since when we were here two months ago. So, it's not exactly something that's totally worked out yet.

Comm. Crawford stated Mr. Schaeffer you've mentioned triggering mechanisms. I wonder if you could tell us what you would consider triggering mechanisms if we don't adopt any standard at all. What occurs then?

Mr. Schaeffer answered to be honest with you what we're mainly concerned with is an Owens Valley type situation. We are very afraid that some federal money will be made available or other monies will be made available for the purpose of buying up water rights. David Haight and Mr. Strachan and a whole bunch of other people that were concerned are not water rights holders. They live, or are familiar with, and love the Yerington area and if you start to destroy agriculture there, again, the farmers are not going to get hurt if they get their water rights bought up, that includes their entire operation, eventually if you bought out the whole thing. All you have to do is look at the history of the Owens Valley as I've repeated. And what we're concerned with is that it will free up federal funds for the purpose of buying up those water rights. Granted, there's not a whole lot in place right now to stop that anyway. But there are federal programs that would immediately be triggered because you want to meet those Clean Water Act standards. And that is why you're seeing a (inaudible) cry go up in Yerington. You saw it there. You saw the packed room at the time and you've heard it from speakers there and here. People are deathly afraid of what happened to the Owens Valley.

Comm. Crawford stated I'll rephrase my question. As I understand your testimony, you're asking that unless we can show that the standard we set is achievable, that you would prefer that we don't set any standard at all. Is that a fair statement of your request?

Mr. Schaeffer answered yes. That's a fair statement. That's my understanding of what the Clean Water Act says. It says that you set standards where they can be reasonably maintained and there's two versions of the act. There's a State version and a federal version. One of them specifically, and I can't remember which one it is, specifically says that you have to take into consideration economic factors, communities and so forth. The other one simply leaves that up in the air, but it's reasonable to see that it would be implied in that based on the legislative history of it.

Comm. Crawford asked and it's further your statement then that if a standard is set and it is not achieved then there are some federal triggers . . .

Mr. Schaeffer answered yes. My understanding is that monies become available and federal agencies could then come in and do various things. I mean we're seeing already, I mean it has nothing to do with this, but one of the issues that personally concerns me in the west is the selling of land to buy other land and you get less and, more and more, the federal government ends up with more and more land.

Comm. Crawford asked I guess my question is you're concerned about the triggers based on standards?

Mr. Schaeffer answered yes.

Comm. Crawford asked what can you tell us that you're aware of that might be similar triggers if there's no standard established at all?

Mr. Schaeffer answered if there's no standard established at all, I don't know of anything that would be triggered. There's nothing that would happen other than simply people approaching their senators and congressmen and also the federal bureaucracy for funding for a dam such as what we're talking about. Again, if you were to postpone it, you set standards every year, you have these types of hearings every year as I understand it under statute, approximately anyway. Maybe it's under the code, I can't remember. So, if you were to postpone this at least for a year until we found out where we can go, whether there's any federal money available for something like this, it would probably help a lot. We would know whether or not at that point we could set some kind of standard and meet it. No one in Yerington, it's close enough to Walker Lake, face facts folks, everybody from Yerington knows Walker Lake. They go over there all the time. They would love to fish there too. But, if it's going to cost them their livelihood that's a whole other story. That is what they are so much afraid of which is why we would love some time to explain the dam. That's why the dam idea came up. It's not like we stopped caring or worrying about Walker Lake. We care. But we don't want it, if it's a trade off between the lake and the agricultural community, we're obviously standing firm with the agricultural community.

Chairman Close called for further questions. There were none. He called upon Marlene Bunch.

Marlene Bunch introduced herself as a representative of the Walker Lake Working Group. She stated it's ironic that we're back here again talking about the same old thing over again. You know we always seem to look at what kind of impact it's going to have to the farmers upstream. Well, farmers upstream are not the only impact. In the year 2000, the Division of Wildlife issued 316 boat licenses in Mineral County alone. Fishing licenses, Mineral County alone in regular, senior, combination and youth licenses was 932. Added to the day-use of licenses for licensing year 2001 was 1,865 licenses that were issued in Mineral County only. Now this is not taking into consideration any facts from Lyon County or from Churchill County or from Nye County where there definitely are more people that come and utilize the facilities at Walker Lake.

You know, to say that we should just put this thing off for another year, why? I mean why should we? All we're doing is putting off an inevitable that's going to happen anyway. You know, there's only one thing that I know that has been cast in stone and that's when God gave Moses the Ten Commandments. Everything else from thenceforth is not cast in stone. It's ironic that all of a sudden we start talking about standards that we are having, that all these Johnny-come-latelys come up with these solutions about damming off half of the lake and it's everything but what we can do in Walker Lake so they don't have to require so much water. But, in order for this whole thing to meet we have to meet halfway. What are the ranchers, the AG people, all of the upstream users going to give if we give half of the lake? Are they going to consider conservation? This "use-it-or-lose-it" attitude of the State teaches waste and want. You waste it and you want it downstream and that's the only solution to it. We have to really start looking at conservation throughout the entire system. The people in Mineral County do not want to shut farmers down upstream. We realize their livelihood and we, more than anybody, know that the businesses rely on it because our businesses rely on Walker Lake as well. When we start looking at the entire picture, we have to address all aspects from upstream to downstream as well. Here we are. Walker Lake should have had standards set in the '80's when then Clean Water Act was put forth. It was supposed to have been done last year. Putting it off another year isn't going to

help anything. Let's go ahead, let's get some standards set. Let's put in place what we've got and then let's go from there. If it is not doable, let's come back and readdress the situation later. To say that we're just going to put this thing off for another year is like telling the redheaded stepchild to go away because I don't want to look at you right now. It's not going to work. It's not going to work at all.

You know, the residents of Mineral County feel very strongly about their lake. So much so that they've passed, for a second time, a tax initiative of four cents per hundred in order to assure that their resource stays there. To look at any other solutions, you know, to put it off and put it off and put it off is not going to solve it. Right now there is, per the Department of Transportation, 3,000 vehicles per day travel along that lake. You take that, that's a daily average, that makes 1,995,000 vehicles a year. Now, what that means is this many drivers if it was allowed to be dried up, if we just put our heads in the sand, if it's allowed to be dried up, could be faced with the EPA's hazards of dust hazards such as in the Owens Lake of what they're dealing with now. It's easier to put off the problems now than to wait until it's too late and have to deal with bigger problems. I say let's set a standard. Let's get the ball rolling right, wrong or indifferent and then if it's not doable, let's go back and look at it again. But we've got to start somewhere and let's start today.

Commissioner Ricci stated I remember from the testimony and the information put together by the Division of Environmental Protection last meeting. The graph that they showed just showed the 10,000 number being met, I believe only on probably one occasion, or even getting close to it. I'm not sure if it was even 10,000 or less. What would happen if this Commission would set the standard at 10,000 and it goes on as most people would know, unless there's some significant precipitation event that's going to drive it down, that they don't reach that number?

Ms. Bunch asked how would we know if we don't try it?

Commissioner Ricci asked what would you as the Walker Lake Working Group do then to try to force that standard to be met?

Ms. Bunch answered well, you know, there's other things that's coming down the tubes and one of them is a legislative matter that we're hoping to get discussed this year that's a pilot project, it's still on the ground floor. I'm not really at liberty to speak about it very much other than you will see things coming up in the next couple of months that could be a very big impact. What it does is it assists the farmers that want to take part of pilot projects to where they can best save water on their land where they can produce all the AG. they always have before, but in return for water saved, send it to the lake. It's coming down the tubes and watch for it in the near future. We don't want to put anybody out of business. Ten thousand TDS is a good middle-of-the-road. We would like to see it at 8,000 TDS. You heard WRID request 12,000 TDS. Okay, let's start at 10,000, let's go somewhere. If we don't start at 10,000 TDS then, okay, we come back in a year and readdress it. But, we've got to start somewhere.

Chairman Close called for further questions. There were none. He called upon Jean Baldrige and Gordon DePaoli.

Gordon DePaoli introduced himself as representing the Walker River Irrigation District. He stated in our written presentation at your December 5 meeting at pages 2, 3 and 4 there is a summary of the litigation which is ongoing on the Walker River if you have an interest in that. To answer Commissioner Dahl's question regarding what it would take in terms of land out of production in order to meet and continue to maintain the 10,000 mg/l standard, Dr. Alex Horn, in 1994, predicted that it would take about one-third of the long-term annual average yield of the drainage basin to preserve the lake and an outright purchase of about one-half of the water rights in the basin to achieve and maintain

that 10,000 mg/l TDS level. There's about 80,000 acres of irrigated land within Nevada in the boundaries of the district, 26,000 acres of irrigated land in Bridgeport Valley in California and about 14,000 acres of irrigated land in Antelope Valley in California. If everyone was involved equally, about 60,000 total acres would have to go out. If it all happened in Nevada, 60,000 out of 80,000 would have to go out of production.

As you will recall at your last meeting, the District made a number of recommendations as to water quality standards for the lake. Since your meeting we have done a considerable amount of work to provide some detail and supporting information for those recommendations that relate to a sliding scale that is responsive to variable climatic conditions that we think are attainable which we think are respective of existing water rights and which we think will maintain the ecosystem at Walker Lake. One housekeeping matter, Mr. Chairman, I have here a letter that I was asked to deliver from Lyon County, the Lyon County manager to you as chairman.

It says, "Dear Chairman Close, please let this letter serve as Lyon County Nevada's support for the ecosystem approach proposed by the Walker River Irrigation District that requires a sliding scale standard respective of climatic conditions as it might relate to Petition 2000-10. Additionally, Lyon County opposes the arbitrary setting of the TDS level at 10,000. Sincerely, Steven Snyder, Lyon County Manager."

I would like to have that made part of the record.

Chairman Close stated if there's no objection, it will be made part of our record.

Mr. DePaoli stated I have a couple of things that I would like to hand out to you and to the Commissioners.

Chairman Close asked has this previously been to the staff so they have had a chance to review your presentation on this matter?

Mr. DePaoli answered the staff has seen the detailed presentation Mr. Chairman. I don't believe the staff has seen these specific changes. The first two that I'm going to describe the staff is not familiar with the change relative to the sliding scale value, single value for TDS the staff has seen that presentation. We made that to them on February 5 and then provided them hard copies of that.

Chairman Close asked are there any extra copies that we can give to the audience, if anybody needs one?

Mr. DePaoli answered we left the extras . . .

Chairman Close stated okay. If anybody in the audience wants a copy of what we've just received, there are some extras up here at the front desk.

Mr. DePaoli stated what you have are some proposed changes to specific sections of the proposed standards. Our changes are either indicated by strikeout and new material is in bold and underlined. I'm going to speak to two of them and then Jean Baldrige will speak to the one of significant importance or the principal one related to the details and support for the sliding scale standard. The first one is in Section 2 and I don't think should be of significant controversy for the staff. Section 2 now specifically states that the standards must not be construed to amend, modify or supersede rights to quantities of water which have been established by the State engineer. We would like to add to

that, “or by applicable court decree.” Most of the surface water rights on the Walker River system were not established by the Nevada State Engineer. They were established in the court adjudication in the United States District Court in litigation that ended in 1936. And so we would like to have that addition made.

The second proposed change is in Section 3 Beneficial Use number 4. As currently written, beneficial use number 4 states, “propagation of aquatic life and more specifically the species of major concern are tui chub, the Tahoe sucker and adult and juvenile Lahontan cutthroat trout.” We would suggest that be rewritten to indicate, “propagation of aquatic life in a terminal lake ecosystem,” which Jean Baldrige will talk about, “including the tui chub. And then, “Maintenance of a put-and-take fishery of Lahontan cutthroat trout.” The principal reason for that change is that propagation suggests that there is natural reproduction occurring. The water quality standards that are proposed here I don’t think anyone will contend, allow for propagation of Lahontan cutthroat trout in Walker Lake. So the standard is designed as proposed to maintain a put-and-take fishery and that’s the reason for that change.

I would like now to ask Jean Baldrige to come forward and . . . excuse me there was one additional change that we have proposed in the last portion of the proposed standards. We just suggest an addition which we think would highlight a bit more the concern expressed in that provision to begin with and we have proposed an addition to that so that it would read that, “Because Walker Lake is a body of water without a natural outlet, the Commission recognizes that water quality can be significantly impacted by climatic conditions,” and this is the addition we propose, “and may become more saline in the future especially during drought conditions and, thus, that attainment of standards may not be achievable at all times.” With that I would like to have Jean Baldrige make her presentation regarding the proposal that there be a range for TDS levels of between 10,000 and 14,000 mg/l or a five-year average of 12,500 mg/l. We have a handout for that as well as a slide presentation Mr. Chairman.

Jean Baldrige stated good morning Mr. Chairman, Commissioners. I’m happy to be here this morning. I appreciate the assignment that you gave me at the last hearing to go forth and develop the sliding scale criteria that we had proposed at the last meeting. We’ve been very busy over the last couple of months. I have Ruth Sundermeyer of my staff here, she helped me out in this regard and I had several other individuals working with me at Entrix. I am a fisheries consultant. I’m here on behalf of the Walker River Irrigation District. I work a lot on the West Coast. I work for a very diverse set of clients. We have a practice too, physicians have practices, but consultants think they have practices too and my practice takes me from Idaho, Washington, Alaska, down the Coast and into Nevada and sometimes Colorado and I end up doing a lot of work for state and federal agencies, Fish and Wildlife service, Bureau of Reclamation, (inaudible) fishery service. I was hired by the Audubon Society and the Mono Lake Committee to assist them in the Mono Lake proceeding. So I have kind of an enjoyable job that I get to work with a large diversity of people.

We have a PowerPoint presentation that we’ve put together and I’m hopeful that I’ll be able to get through it. As I said, last time that we were here we presented a concept and we spent some time (inaudible) we have had an opportunity to meet with the folks over at NDEP to present to them our thoughts and ideas about how this might go forward. We think that we have an option for you to consider that’s different from the 10,000 standard that we have. There’s been a lot of discussion about the 10,000 standard. The 10,000 standard is difficult to achieve given our current situation, so we’ve been working on an approach that really considers the ecosystem, it looks at how the fish really occupy the habitats within Walker Lake and what’s needed. There’s been some new information that’s coming forth from NDOW. They have a great program where they’re doing the acclimation of juveniles before they put them into Walker Lake, which has dramatically increased their survival. I think that will figure prominently in how we move forward to manage Walker Lake and be able to preserve the fishing opportunities as well as meet some standards and be respectful of the other beneficial uses that are going on upstream in the tributaries.

What we started looking at was we have the standard that's been proposed. It's 10,000. It's really focused on a single location, Sportsman's Beach. That's where most of our information comes from. The standard's not currently being achieved and hasn't really been achieved for some time. Dr. Warburton mentioned that one measurement that came in at about 9,000 something level. That may have been a spurious point. I think it was probably more related to inflow that we had in 1998 where the measurement reflected some stratification. But, nevertheless, 10,000 is not a number that we see very often in Walker Lake in the recent past and not a number that we would expect to see in the future. The thing that disturbs me about the number from an ecological perspective as well as a management perspective is there aren't management actions that you can take in the near term that will help you achieve that number. There are some pretty good ideas floating around out there. Dr. Warburton's idea about cloud seeding is very interesting. The dam is something to consider. But, currently we really don't have an opportunity to achieve that.

The current recommendations are based on some recommendations coming from NDOW relative to the put-and-take fishery. I don't think when they were considering that they were really looking at the opportunities that are available through acclimation of the young trout. There's been a tremendous increase in the survivability of those fish and I think we should consider that as we move forward. It also doesn't really consider the problem that we have with the wet and dry years here in this part of the world and looking at the information that was presented at the last meeting you can see in wet and dry years what happens to Walker Lake and what happens to the TDS levels within the lake. When we were developing our goal for the sliding scale criteria, we wanted it to be scientifically defensible. We wanted to have it based in science and I have provided a list of the references that we used in the preparation of this at the back of this presentation. We also had a lot of conversations with the staff at NDOW and NDEP. They were very helpful in helping us understand some of the ecological factors associated with Walker Lake and the information that was available.

It's important that it recognizes the variable climate because we don't have a lot of management actions, the TDS levels will fluctuate. We want it to be attainable and sustainable. There's been a lot of discussion about this. We also wanted to tie it to something that was clearly defined and a realistic implementation schedule. When we were looking at the variable climate and lake inflow conditions, we focused on a couple of things: the ecological structure of Walker Lake and the put-and-take fishery, which is so important to the economy of Mineral County. We looked at the life history strategies associated with terminal lake ecology. Our primary focus was really on preserving ecosystem function.

For the beneficial uses we looked at what beneficial uses there would be and what the TDS tolerance levels for those might be. Then, as I mentioned, we spent some time dissecting and trying to understand the function of the ecosystem and then looking into the hydrologic conditions about what the frequency in magnitude of those wet and dry cycles have been there at Walker Lake and what we might expect to see in the future. The beneficial uses that we focused on were really boating, the recreational fishing, aquatic life. We really did take an ecosystem approach here. And then we have migratory water fowl which is also important to the lake.

For the ecosystem we started with the algae and the zooplankton, the base of the food chain. We looked into the prey species. Tui chub are an extremely important resource and one of the reasons probably why NDOW finds that we have better fish in Walker Lake than we do in Pyramid. Even though we have higher TDS levels, we have better production from that lake. The tui chub probably have a roll in that. Certainly, the recreational fishery is important. Then we looked at the birds that eat fish, carnivorous birds and how they might be affected.

This is a range of TDS tolerances. These values come from a number of studies that were done to look at it. Many of them are laboratory studies, but we also have information from Kris Drake on what's been happening with the acclimation of the Lahontan cuts as they go in there. The first category is really boating. There's really not a good TDS level for boating. I mean almost anything will do. So that doesn't really dictate what we might do here. Looking at the Lahontan cutthroat trout, where we have the studies, it shows that they have quite high tolerances for adults in TDS levels. The lab studies go up to 24,000. Of course, lab studies are only one perspective in a lake. You have to go back and look at the ecology. And one of the things we did was look at what happened at Walker Lake as we went through the drought cycle.

The next column over is what happens with the juveniles that we plant in the lake where we don't have acclimation. Basically, when we're looking at these levels, one of the things to keep in mind is what we call the 50 percent level. That's where we lose 50 percent of the fish given a particular 96 or 24-hour test. Those values figure prominently in the development of many water quality objectives. But, basically when you're looking at a 96-hour test we have the 13,000 level with no acclimation, we have about 50 percent mortality. Where we have acclimation, the information coming from NDOW now says at levels above that, 13,200, we still have 90 percent survival of those fish that are acclimated. That's a pretty substantial increase in the survivability of those young fish. Most of the information that we have available is without acclimation, from lab studies and others. So there is some information coming from Pyramid about acclimation. There's some information that we have from the work at Walker Lake. But much of the material that's in the record was done on Lahontan cuts without acclimation. It changes the picture. It changes their physiological response to the total dissolved solids.

Regarding the birds, they don't have TDS tolerance levels themselves. We have lots of birds that are on a salt lake in Mono Lake, but they would be related back through the tui chub, which is what those creatures eat in part. The tui chub are one of the most sensitive species found. We found particularly the reproductive phases of tui chub are the ones that require the lowest TDS levels. We have the 50 percent mortality level for tui chubs at about 9,300 TDS levels. It was interesting for us to note that even though we have a low level that indicates that those populations would be in trouble, we have those fish doing fairly well at much higher TDS levels in the lake. That indicated to us that we needed to look a little closer at what was really happening in the lake to determine where those fish were conducting their reproductive activities and how it fit into the overall ecology of the lake.

The historic lake elevations tell the tale here for Walker Lake. This is a graph many of you have seen over and over again. It's clear that we have a declining lake and TDS levels are going to continue to increase. What is interesting to note, as you look down through that record, is that there are fairly regular times where we get a series of wet years, where we get an increase in lake levels. So it's not, although the trend is very significant and it's a steady downward trend, it's not always down. There's wet periods that come in and you can see the last wet period that we had in the '80's and the current wet period that we have now, we have increasing lake levels moving forward.

Here we have some projections that were done by Paul as to what might happen given various inflow levels. I've marked on there the TDS level at about 10,000 is on that graph. You can see that for the future projections it looks like the lake level will continue to decline. Also, based on Paul's information he provided some information about what he would expect TDS levels to be in the future and the open squares are the projections based on Paul's information. As we go forward, it looks like we are going to be facing ever-increasing levels of TDS in the system. So, we have a terminal lake system. We need to really consider how the terminal lake ecosystem works, what the beneficial uses are going to be, and how we should protect them. We have variable climatic conditions. We also need to recognize that within an ecosystem the species have evolved to be fairly resilient in many cases and that they have

life history strategies which help protect them against stressful periods. It's part of what they go through in evolution and in part we can look at those and figure out how to make the system work a little better within Walker Lake.

One of the things we focused on was what happened to the resources when we went through the last drought. When you look at the last drought which is really that downward dip we got to values that went over 14,000. They were over 13,000 for several years and then we started to have the TDS levels go down. We thought that was an important event and would provide us a window to look into what happened to the ecosystem at that time going through that. So the TDS levels rose from about 8,000 to over 14,000. We had no substantial inflow to the lake for several years and that turns out to be also a very important parameter for preserving the ecosystem. TDS levels are one measure, inflow is a different measure and there seems to be some evidence coming out that TDS levels may not be as important to us as overall inflow might be for the preservation of what I'm calling special habitats out there. We saw some shifts in the zooplankton community as we approached the 13,000 - 14,000 level. We saw condition in the Lahontan cuts becoming poorer and we saw the tui chubs not as robust and we saw a reduction in tui chub's reproduction. As we were coming back up the curve, NDOW reports that at levels about 12,500 we saw marked improvements in the Lahontan cut condition and the tui chub reproduction was back up again. So, as you put the picture together, it's clearly a very complex system out there at Walker Lake.

This is a little graph I gave you to look at the total fluctuations of TDS. These are average annual values. So you see the average annual went up in '94 to 13,000. And then we start back down again. But we don't get down to the 10,000. We're kind of on our way and if we have a whole bunch more wet years it is possible that we will get there, but we're probably due for a change this year. It seems we're not getting our wet year. Put on the side of this graph is kind of some ranges where it looks like what happens in the ecosystem. The low range. It looks like we have full function there. In the mid-range we have good function, and in the upper range we start to lose function as we move through the TDS levels with the ecosystem.

What did we learn from this episode that we had? What can we learn from history? I think history is pretty important. I was almost a history major, but biology won out. We found that the lake can tolerate levels between 12,500 and 14,000 for several consecutive years and once we get good conditions it recovers pretty vigorously. Last year we had really good fishing in the lake and we had very good production of tui chub. We also know that as we get up into the 13,000 and 14,000 ranges we have signs of stress in those populations. We also note that occurs when we had no inflow. It would be an interesting experiment to have inflow when we had levels of 13,000 and 14,000 to see what happens then.

The improvement that we saw at 12,500 with the tui chubs and Lahontans was also accompanied by inflow, 1998 and '97 had some substantial inflow. '98 was where we saw some of those improvements beginning to take place and in '99 we saw even more improvements. That led us to really consider what those special habitats might be because if we really are starting to lose a lot of our production of tui chubs at the 9,000 level, well where are those fish spawning out there and how are they finding the low TDS levels? So, we recognize that the TDS levels within the lake vary. Some of the information that's been collected by the NDEP staff shows that we have some variation, both seasonally and within the lake. What we haven't had an opportunity to get really good information on at all would be those micro habitats or special habitats where the resources may be depending on. We also know that the lake levels change seasonally. We have surface flows. This is a satellite photograph of Walker Lake. You can see the inflow coming in. As the inflows come in, you can create habitats. We have the major inflow coming down the west side and that can create some special habitats that have lower TDS levels. That may be where we got our 9,000 level that seems to be an abhorrent point. Down at the bottom of the lake we also have a wetlands area down there where there's some additional inflow and that area looks like it would be an important part of the special habitat concept.

One of the things that we did was we went out and we talked to some fisherman. You know when you're in a new

area as a biologist looking at fish you can find out an awful lot from talking to fisherman, particularly ones that are on the lake a lot and know the lake well. We had some very good information that came out of our discussions with the local fisherman about where they fish for Lahontans and what is in the stomachs of the Lahontans when they catch them. We found that a lot of their success where they found Lahontans moving in to feed and they found young tui chubs in their stomachs was in areas where we have underground springs in the lake and those are the areas that are marked on this map with little arrows. But those areas are scattered around. Now we know that from some of the estimates that there's not an awful lot of water that comes in for those springs. But what water does come in can make some very important habitat for tui chubs. The other part of the tui chub life history is the area around the outside of the lake where we have vegetation. That's important for their spawning.

So, terminal lake ecology can be fairly resilient through drought periods. We really need to think about that and the opportunistic use of those beneficial habitats by the species that are there and how it overlaps with the key species in their life history strategies. I think the reliance on special habitats is pretty important in a lake like Walker. The tui chub are one of the ones that I mentioned that we focused on. They're a very interesting species. They live up to 30 years. We found that out because we started looking at their bones in their heads as opposed to scales. The scales indicated they only lived to be seven or eight years and some of the older literature indicate that, but as you get into the tui chub and their life histories they're very long-lived fish. That really helps them bridge these drought years because their reproduction capacity doesn't go away. The adults have very high tolerance values for TDS levels and so they can go several years without reproduction. When they get the opportunity they reproduce and the cycle begins again. They do require lower TDS levels for spawning. They're spawning in the late spring, early summer period. That maybe a time when there's an opportunity to occupy some of the special habitats to get the spawning done. They also develop very quickly. The embryos are fast-growing.

This is a picture of the marsh end at the south end of the lake. There's some spring activity that's in the lake down here at this (inaudible). Just a little bit offshore is another favored fishing spot for catching Lahontans and tui chub are common in this part of the lake. These special habitats bring us into some management implications of special habitats. They function at a higher TDS level in the overall lake. So Sportsman's Beach can have high TDS levels and these habitats continue to function, which is kind of an important concept when you look at it. It would be possible I think to develop some very specific management actions to target some of these special habitat types. Dr. Warburton talked about cloud seeding. The cloud seeding would go directly into the groundwater. It would enhance the spring activity out there. It would also probably increase the inflow. There could also be some targeted water releases possible out of Weber or out of some other systems that would provide the input that we need for some of these special habitats. So, I think that we could achieve some protection there.

Looking at the regulatory framework, we wanted to develop the standard that could be implemented within the existing regulatory framework and not all of these concepts fit well into what we need for the Clean Water Act. We also wanted to develop the standard that you could clearly tell whether you were in compliance and what type of compliance there would be so we would know if we were meeting our standards.

The beneficial use that we focused on was really the protection of the terminal lake ecosystem. We think that's going to be protective of the other beneficial uses. When looking at the special habitats we think that the special habitats and the life histories of the main underpinning components of the ecosystem combine to make Walker Lake fairly resilient and that's part of what we saw coming out of the drought. There is probably the opportunistic use of spawning habitats and other habitats within the lake. Walker River inflow to the lake is really an important

component of the ecosystem and I'm hoping that we'll be able to understand a little more about that as we go forward with our future monitoring program.

The frequency of drought and severe conditions, if you look hard at the record you'll see that we have a lot of changes, as I pointed out, where we have increases in lake elevation. We have very few years in the record where it looks like we have a complete loss of surface inflows, but it does occur infrequently.

The standards that we move forward with were to look at an acceptable range of TDS between 10,000 and 14,000. Fourteen thousand is where we end up at the end of the several-year drought condition. It's not where we want to be, but it's where we might be. The TDS values above 12,500, we thought that a TDS value above 12,500 should not occur for more than five consecutive years. Twelve thousand five hundred is a measure that comes from looking at what we're doing with the acclimation program with the Lahontan cuts and also with the history of what happened when we went through the drought. It's based on history. It's based on ecology and the continued implementation of the acclimation program for the Lahontans.

Let me look at noncompliance with the standard or when we would be exceeding it. We would exceed it if we exceeded 14,000 at Sportsman's Beach or if the average annual TDS concentrations were greater than 12,500 for five consecutive years. The five consecutive years also comes out of the last drought sequence for what the lake experienced there. Let's look at the graph, maybe it's clearer there. This is a hypothetical graph. It's pretty consistent with what we've seen the lake in the past when it goes through these drought conditions. We're looking at measuring the average annual inflow TDS levels of the lake. We have the first point at about 11,500 and then we go up to 12,000 from there. So we're in a dry cycle. Once you hit the 12,500 level, the five year clock starts. You continue through this dry cycle. We have a peak value shown at 13,500 and then we start getting into the wet years and it comes back into it. So we have the next value that's coming down. Then the lines diverge and there's two lines. One line shows what happens if we stay in an extended period of drought and the other line comes back down allowing the ecosystem to fully recover.

The objective of the water quality TDS standard is really to provide protection to the special habitats to support tui chub. We know that these special habitats are out there. We know that around 14,000 it seems like their becoming impaired and they're not functioning as well there. It would be interesting to explore some management alternatives to look to see what could be done for those special habitats at those levels, but currently we know that 14,000 is what the lake has seen in the past and it has recovered quickly. We also are interested in making sure that we have the food resources for the cutthroat trout fishery so we have fish out there that are in good condition and we also want to provide a food supply for the water fowl.

The sliding scale that we have developed for the standard, we think it is protective of the ecosystem. It allows the variation from hydrology. We also think it's reasonably attainable and it will provide opportunities to further refine the management options that will provide further protection as we move forward with the terminal lake ecosystem. This standard is a standard that you could adopt today. You could adopt part of it. You could adopt all of it. It's a different approach from the 10,000 standard and I think that it will serve Walker Lake well and I hope that you'll consider it.

Commissioner Iverson stated I think I may have been the one that suggested that you go back to the drawing board and come up with a sliding standard when you talked about it last time in Yerington. The concern that I was having at that time, I think the concern of a lot of us on this Commission, is the uncertainties. We don't know quite what's

going to happen. I think the sliding scale work that you've done is really good and it does provide us an alternative to look at. While you were doing this, did you also prepare anything that shows what happens with this sliding scale to upstream users? We heard some information this morning about how much water would have to be put into the lake, what portions of the upstream users would have to be bought out, etc. That helps us as a Commission to look at the economics of this issue. Is there information that you prepared that shows a correlation when you go from 10,000 to 14,000 or what happens upstream?

Ms. Baldrige explained we presented some information last time about what would happen at the 10,000 level. When we look at what would happen at the 12,500 we think that we have an opportunity to maintain this standard without a lot of adverse economic consequences to either the fishery or the agricultural community. There is going to have to be some targeted focused actions taken to maintain Walker Lake. I think that in part those can come from some releases out of Weber Reservoir. There's some opportunity for additional inflow down at the south end of the lake. If we move forward with the proposal to do cloud seeding that also could provide a lot of support for the lake and how this system would work. Given where we are with our current levels and where we are with the fishery and the tui chub populations, I think that adopting this standard would allow you to develop some of those focused management alternatives and options to consider those fully to move forward to really manage Walker Lake effectively.

Commissioner Iverson stated I've heard three things this morning that I haven't heard before and they're very positive things. I think at least from my perspective there's things that I need to think about as I cast a vote on which way this goes. One is your sliding scale proposal which gives us some flexibility and it gives us some time to look at what's happening out there, but yet we still are establishing a standard. I agree, I think the economics are going to prove out that it is something that maybe, underline the word "maybe" that people can live with on both sides. The other thing that I heard this morning from a gentleman from Mineral County was pilot programs. I think this type of a program gives you the opportunity to work with your agricultural industries where maybe you could implement some pilot programs where you could take a look at what's happening in their operations and some things that they're doing to make it more effective, more efficient and to see what the impacts would be over a period of time. But I don't think there are very many ranchers in the State and farmers that aren't willing to step forward and get involved in some programs that are pilot in nature and to show the outcome and to see what impacts they're having. I heard another comment from the geologist back here where we're talking about straightening up and redoing some of the channels through the wildlife area that may impact temperature along with other elements that we're talking about. So, at least I think we're getting to some areas where it's not just confusion and "what if?" Are we using best sciences? We're actually starting to look at maybe some solutions to this problem. I was a little concerned about the Mineral County's representative this morning talking about this Board. It seems like we have a lack of interest in Mineral County. This is an extremely difficult thing. If you're concerned about Mineral County, you must not be concerned about Lyon County and if you're concerned about Lyon County, you must not be concerned about Mineral. I think when you look at this whole system that's the way you've got to address it. So I commend you on your work.

Ms. Baldrige stated thank you. Walker Lake is a very complex ecosystem. It's an important resource for Nevada. I think that we want to really do the right thing for the lake as well. One thing about setting water quality standards, it's much easier to set more stringent standards as you go through your triennial review than it is to relax those standards as you're finding as you're considering some of the ones that the staff is still in preparation for. I think the standard is a workable standard. I think it's a protective standard and I think it provides lots of opportunities and incentive to come up with some of those management alternatives that will really solve the problem at Walker Lake. If you have a standard that no one can meet, there's no incentive to do anything about it except to complain.

Commissioner Gifford stated another interpretation of this presentation might be that you haven't presented a sliding

scale at all. You've simply raised the ante to 14,000 mg/l as an upper limit and then added the caveat of a floating 5-year average of 12,500 mg/l. Is that a correct interpretation? In other words, your limit is given now, but 10,000 to me could be 1,000 to 14,000 for that matter.

Ms. Baldrige explained given where we are in the lake, I don't expect us to see 1,000. I'm not sure that we'll see 10,000 in a whole lake number. I think that what we're expecting is that there to be a range of values. I don't expect us to be at 14,000 very often either. I think that the important thing is to look at the range of values that we're likely to incur as we move forward with the lake and as we experience the hydrology that comes.

Commissioner Gifford stated well, given the trends presented by a variety of people, including yourself, in terms of lake elevations and so forth and granted you have little blimps and as you alluded to the lake level goes up on the average of once every three years, but obviously it's not going up nearly as much as it's going down given the long-term trend. So, in terms of not seeing 14,000 very often you might be able to say that at close to noon on the 15th February, today. But given some time down the road, 14,000 could be very common. And 16,000 could be very common. So, I think you're ignoring the trend a bit and being a little bit optimistic here where your trend lines don't quite indicate the optimism that you're conveying to the Commission. Would that be a fair interpretation?

Ms. Baldrige answered I'm not sure that it would be a fair interpretation about by optimism. I do think that in a terminal lake system like Walker Lake we're going to continue to see TDS levels rise. But I do think that by the time we get around to collecting some additional information, further defining the special habitats and looking at the management alternatives we may find that the TDS level is not as important to us as we think it is now in maintaining the ecosystem in Walker Lake. Inflow may be equally important. The preservation of special habitats, taking management actions that would preserve those special habitats in the face of increasing TDS levels is where I think the future management of Walker Lake will really go.

Commissioner Johnson stated I also have some problems with, referring to page 7 which is the historic and projected Walker Lake elevations, that a sliding scale is simply a postponement of adopting a standard of which we will violate. You presented a hypothetical that after three years we get this inflow and you come back down, but the long-term projection, barring outside changes of past activities, i.e., an agricultural diversion, that the long-term projection is going to put you to 14,000, 16,000 and on. You're simply delaying the time an exceedence of standards would force you into action instead of voluntary action. This Commission didn't adopt standards in the past for whatever reason. There hasn't been anyone stepping forward to take these management actions. Why should we anticipate that there would be anything taking place before the time at which we exceed the 5-year 12,500 year average?

Ms. Baldrige answered when you're focusing on the whole lake and you look at the amount of water that's needed to reverse those trends it's pretty scary and there's no good pathway to what can you do. When you focus on special habitats or take a different look at the ecology of the lake I think many things become much more doable because what you're doing is you're capitalizing on the natural system that's out there. We have spring inflow. Maybe we need a little more. Maybe we can get that. We have another system, you know, the wetland system down at the lake. What can we really do to enhance that? I think when you look at those problems those are tractable problems. Those are problems that you've already heard some testimony on today about potential solutions or potential things moving forward. I think when you break a management problem down into its components it's much easier to begin to develop reasonable solutions for those. But, frankly, looking at large changes like the type of water rights that would need to be purchased or what would happen to the demise of the Lahontan cuts with the fishery? Those economic reasons are diametrically opposed to each other and I don't think they have to be because I think we have some ways

to deal with those. I think we have the acclimation program that NDOW has started that's very successful. I'm anxious to see how that goes forward in the future. We have several years experience with it. I think that you will find that people will step forward from the AG, community and others to make a commitment. Walker Lake is important to everyone in the region.

Commissioner Johnson stated I appreciate the definition and identification of these smaller ecosystems. I think it's very significant in developing a protocol for future action. I simply wish at this time, and maybe it'll keep me from speaking later and it's not directed at you, but a comment that I haven't seen action in the past from the so-called "stakeholders" to step forward except under threat of some action and therefore I really don't see a sliding scale as beneficial to this action and it's simply delaying . . .

Ms. Baldrige stated I do want you to understand that we don't have a lot of information on the special habitats. The information that we have comes from the local fishermen, it comes from some measurements that we have that have been collected at the lake. But we really don't have a lot of solid information about how those habitats respond.

Commissioner Iverson stated I appreciate the comments that are being made. I appreciate your optimism because for two meetings we've heard a lot of "we can't do it, what we're going to do is impossible, we're going to adopt regulations that we can't regulate," and so on. I appreciate both of the comments that were made this morning from the geologist and from the attorneys with some optimistic solutions to this problem because it may be the only answer that we'll come up with. Management is important and I think you bring up the point of these smaller ecosystems in that lake and maybe some things that we need to do.

My observation is, and it's only my observation, if we adopt standards exactly as they're proposed I'm not so sure where we go with it. I'm at a point where I think everyone in this valley, Yerington, Lyon County, Mineral Counties understand we have a problem with Walker Lake. I think they understand the problem is not going to go away. Whether the ranchers are willing to get involved with the pilot programs, I think if they're not, then I think down the road we're going to be looking at coming back and coming up with some standard that force them to be involved. But I think what you're proposing and what's being proposed here now as far as optimism is an opportunity for these groups to work together because Walker Lake is not just a single body, it impacts everybody upstream. What standard we set and what we do at Walker Lake as an Environmental Commission is going to have an impact on those people upstream, it can have an impact. I appreciate the optimism. We know we've got a problem, but at least you're coming up with some solutions that we can look at.

Comm. Crawford stated I appreciate the optimism because I'm optimistic that we can do something with this situation also. However, I hear a lot of talk about the Walker Lake ecosystem and I think we need to be considering the Walker River ecosystem from start to finish. I have quite a number of questions in that vein and maybe Mr. DePaoli's more the one to answer this question. I don't see that you have made suggested changes to the standards for the rest of the river. Does that mean that the district accepts those?

Mr. DePaoli stated we have not proposed any changes to the standards for the rest of the river which I would say means that we are accepting those, or on your adoption of them (inaudible).

Comm. Crawford stated you mentioned earlier that there's no TDS necessary for boating, anything will do? I think you'll find a number of boaters that might disagree with that. It's very difficult to run a boat in the Great Salt Lake. Maybe you would want to address that. But, your recommendation is to eliminate any mention of the Tahoe sucker,

adult and juvenile in this. Could I ask you why?

Ms. Baldrige answered looking at the Tahoe suckers, their populations are declining in the lake and I think that their roll and their function are somewhat being taken over by tui chub and that was the species that we focused on.

Comm. Crawford asked so we're writing off the Tahoe sucker because we can't save it? Is that the message?

Ms. Baldrige answered oh, I don't know that we're writing them off. No, they're part of the ecosystem. I think we're just not calling them out as a key species. The tui chub were called out as a key species.

Comm. Crawford stated okay. And I guess following on with that then we've gotten into a situation in Walker Lake where we're not going to be able to do anything on behalf of the Tahoe sucker so the tui chub are now the key species?

Ms. Baldrige answered I think the tui chub are the key species. I don't know if we're going to be able to do a lot with the Tahoe suckers. I think that they probably have some special habitat that they're occupying as well. I don't really have very good information on what special habitats the suckers have. The information that I have on tui chubs comes from the interviews that we did with the local fisherman, where they see them, the time of year they see them and how they see them occupying the habitat. They didn't have any observations for me on the Tahoe suckers.

Comm. Crawford asked so you're not sure how significant the role in this ecosystem of the Tahoe sucker is?

Ms. Baldrige answered the other element that Ruth just reminded me of is that for the Tahoe suckers it's really spawning in the river which is one of their main limitations in the system and we're really focusing on the lake ecosystem.

Comm. Crawford asked but spawning in the river is the significant limiting factor for Tahoe suckers?

Ms. Baldrige answered it's one of the factors for Tahoe sucker populations, yes sir.

Comm. Crawford stated I think you mentioned that we have reached 14,000 TDS several times, yet your charts, graphs and etc. don't show that.

Ms. Baldrige stated actually if you look in the blue book, my graph was really based on average annual numbers, the one I showed you for what happened through the drought, on page 20.

Comm. Crawford asked so the averages have not reached 14,000?

Ms. Baldrige stated that's correct. The averages have not reached 14,000. We have had individual levels about 14,000 and very close to 14,000 through the last drought and I think you'll find that information on page 20 of the blue book.

Comm. Crawford asked and am I correct in your search that there are these individual special habitats and underground springs but you don't really have any documentation for that other than anecdotal?

Ms. Baldrige answered yes, that's correct. We just have anecdotal information on that based on the information from

the locals that are there on the lake and the catches they have and the presence of young tui chubs in the stomachs of the Lahontan cuts that they are catching in those areas. From an ecological perspective the presence of the tui chub and the reproductive capacity that we have out there now at the levels that we have indicate that we have some special habitat occupation going on as well as the observations that we've had from the local fishermen.

Comm. Crawford stated the location that you indicated on the potential underwater springs, etc. is not factual necessarily, but hypothetical.

Ms. Baldrige stated well I would think the springs are pretty factual because people find them out there with their fish finders. They see the bubbles coming up from below. What we don't know is exactly what the TDS levels are surrounding those springs. I don't have information on that. But the springs are not hypothetical.

Comm. Crawford asked what documentation do you have for the springs?

Ms. Baldrige answered we have the testimony from the local fisherman on their identification of the springs and the maps that they prepared in our meeting. I'd be happy to share those maps with you. What I presented there was a summary of that information.

Comm. Crawford asked will you define what you mean in your proposal for put-and-take? What is a put-and-take fishery?

Ms. Baldrige answered a put-and-take fishery is a fishery that is provided without reproduction, without a natural reproduction system. So you're putting in juveniles, maybe we should call it a put-grow-and-take.

Comm. Crawford stated I wasn't going to coach you. Without respect to the longevity then?

Ms. Baldrige asked without respect to longevity?

Comm. Crawford stated put them in today, take them out tomorrow, put them in today, take them out three years from now.

Ms. Baldrige stated I don't believe that's how you're managing Walker Lake currently.

Comm. Crawford stated I was curious about what your definition of put-and-take is in your proposed . . .

Ms. Baldrige stated well what you're doing right now is a put-take, it's a put-grow-and-take, but you're not relying on natural reproduction for the system. If the TDS levels get too high and you're not able to stock, you can stop stocking when they come down. You can start stocking again. So you're not relying on the natural reproductive capacity of Walker Lake. What you are relying on is the ecosystem to feed those fish so that they do grow into a size that fishermen want to catch and we all know that it takes a while to grow those fish even if they do grow a little faster at Walker Lake. So I think longevity is not something that you want to disregard or discount.

Comm. Crawford stated well I think those are considerations if we're going to define something legally as put-and-take, we need a clearer definition of what put-and-take is. Is it put them in today and catch them out tomorrow? Or is it put them and expect them to grow a little bit and be in the lake for a few years, one year, six years, etc? I think we

would all agree that that's linked to water quality at least partially. Could you give me your opinion on at what TDS the Walker Lake ecosystem begins to collapse?

Ms. Baldrige explained at levels above 14,000. There's even some indication that we have portions of it that is going out of function at 14,000.

Comm. Crawforth asked so is that collapse at 14,000 or is it beginning to?

Ms. Baldrige explained that's where we start looking at collapse. I looked at Alex Horn's information. He looked at TDS levels, he didn't have the benefit of some of your recent work on acclimation, but in his levels he was looking at 18,000 as kind of the threshold. So he had four conditions I think up until about 18,000. I would think between 16,000 and 18,000 is where you would see significant dysfunction occurring within that. But, there again, we really don't have the benefit of looking at that system in the long-term based on what's happening with your acclimation program. We do know that at levels above 14,000 we're seeing a significant reduction in tui chub reproduction which would have an influence on what happens with the growth of those systems. So collapse is in the future from a whole lake perspective. But here again, Mr. Crawforth, I think it's important to recognize that there are special habitats out there that may respond differently than the whole lake does to increased TDS levels.

Comm. Crawforth stated in the 96-hour work that's been done it does not give us any indication of how well the fish are going to do longer term with potential renal failure and etc. I mean they're not going to experience that in a lab in 96 hours.

Ms. Baldrige explained no, when you have a lab study you have to translate it into the ecosystem. The lab studies show that you begin to have kidney damage in non-acclimated Lahontan cuts at levels of 5,000.

Comm. Crawforth stated you've promoted the acclimation quite a bit. Would that be an indication to you that the necessity to acclimate these fish before they're stocked is a sign that maybe there's something askew in the system?

Ms. Baldrige asked askew in the system? You know there are systems where those fish are naturally acclimating as they come down a river system into a terminal lake system. Certainly levels are high in Walker Lake. When you're taking a fish out of a hatchery environment which has very low TDS levels and putting them into a high TDS level, I think acclimation is something that you do with aquarium fish when you buy them in the store and bring them home and float them around in your tank for a while. I think acclimation is an important component. I'm not sure that I've answered your question, however.

Comm. Crawforth stated thank you Mr. Chairman. My cross-examination is over.

Commissioner Gifford stated first I'd like to clarify that I'm also an optimist just in case I've been labeled already. But our problem as a Commission is that we're being asked to approve standards under conditions that are not what may be. That's where I'm hung up a bit. According to testimony, we're short 400,000 plus acre feet to get the lake up to the point where we can meet the 10,000 criteria and on a yearly basis we're short over 50,000 acre feet just to maintain the status quo. That corresponds to the downward slope of your line. Given that scenario and without all the "maybes" thrown in about what could happen in the future, what would be your projected date as to when you would meet this rather critical point of 14,000 mg/l?

Ms. Baldrige explained from levels where we are now if we go into a significant drought, a multiple-year drought, we could be reaching those levels in three years. We could reach them in five years. We could reach them in 10 years. It depends a lot on the hydrology and what the levels are. Three years might be a little soon. I'd have to look at the

regression line to really look at how fast those TDS levels rise, given inflow or no inflow. One thing that may not be clear is that the 14,000 is an instantaneous measurement that you would have. We have some variation in TDS levels. You could have a measurement of close to 14,000 and not exceed your 13,500 and you wouldn't be outside of your water quality objectives. But the lake is at Sportsman's Beach and throughout the center portion of the lake appears to be fairly uniform in some of its characteristics. Dr. Horn did a good job of looking at some stratification and habitats that are associated with stratification for the trout. Any time we put a single point that we're saying this represents the whole lake, you're just using it as an index value, basically. Points around the lake and different habitats will vary and TDS levels will vary. But we need a compliance point within the lake and most of the information has been collected at Sportsman's Beach. If you implement this program and move forward with the monitoring and the data collection, you may decide that Sportsman's Beach is really not your best location for setting a compliance point for Walker Lake or you may decide that it is. We don't have a lot of really good information about how things vary within the lake. But setting this standard would certainly allow that data collection to occur and further refinements to be made. It is very difficult generally in my experience to relax standards. It's much easier to move from a more relaxed standard to a more stringent one if that's what's required to preserve the beneficial uses that you're interested in preserving.

Chairman Close asked what is the present inflow into Walker Lake?

Ms. Baldrige asked do you mean total annual number or what is going on today?

Chairman Close answered the total annual number. For example, last year how much was the inflow into Walker Lake?

Ms. Baldrige answered I don't have the number for last year. Maybe someone else does. The average annual number is about 95,000 acre feet is my recollection. The average annual number is about 95,000 feet from the river. Then there are other inflows that occur. I think the local area inflow is about 3,000. There's an inflow of groundwater springs, which I think is 11,000 and then you have precipitation on the surface of the lake which would be 14,000. Jack probably knows better than I do. But it's about in that range. The precip. number is the one I'm not clear on.

Chairman Close stated so to really maintain the level that we are at now from what I understand it would take about a 40 percent increase of flow into the lake.

Ms. Baldrige stated the estimates range from 40,000 to 50,000 and then most of those are based on Paul's work that he did for the USGS, depending on what assumptions you make relative to evaporation and those things.

Chairman Close asked and there's really no other solution except for additional inflow as far as TDS is concerned?

Ms. Baldrige answered well, there's probably some other solutions, but you'd have to look at the feasibility, like could you really put a de-sal. plant there and clean up all of the water in Walker Lake? Probably not. Can you really achieve that level of inflow given our current economic and social structure? Probably not.

Chairman Close called for further questions. There were none.

Mr. DePaoli stated I just want to clarify one thing, primarily for the audience. When Jean talks about releases out of Weber Reservoir as potential management action to deal with some of the things that may help the ecosystem survive, I don't want anyone to interpret that to mean that the district is proposing a release of water belonging to the Walker

River Paiute Tribe. But Weber Reservoir, which gets I think a bum rap sometimes in all of this, is in a strategic location in relation to Walker Lake to be able to provide timed inflows into the lake when and if information suggests that ought to happen. All we're suggesting, as a management action, is that exchanges of water between the Tribe and upstream could take place to provide those kinds of managed inflows if that proved to be something that ought to be done. But I didn't want anyone to think we were proposing to take Tribal water for those purposes.

Chairman Close stated no one suspected that. Let me ask you a question though. What consideration has the Irrigation District done in relation to conservation methods in order to free more water flowing down to the lake?

Mr. DePaoli answered one of the things that you will find in this Irrigation District is there are several aspects to that Mr. Chairman. On-farm efficiencies within the Walker River Irrigation District are very good. You can go out there and you can see on-farm ditches that are concrete lined. You will see laser-leveled fields. You will see sprinkler irrigation. You will see that the farmers on their farms have done a great deal to be efficient in their use of water. There's a couple of things that come into play when you talk about what else can be done by way of conservation. First of all, you need to think about changes to State law relative to water rights because as I think the State Engineer will confirm that as our law now stands, conserved water accrues to the benefit of the system. It does not accrue to the benefit of whoever is conserving it. So there is some disincentive in that respect. But on the farm there is obviously good incentive to conserve because the beneficiary of that on-farm conservation is the farm itself. There may be opportunities within the district relative to the ditches which take the water from the river to the farms. But anytime that you talk about those kinds of things you also have to keep into account that those ditches that are bringing water from the river to a certain extent are also providing other habitat. They're providing a recharge to the groundwater basins. So there are some counterproductive things that go on there. But if one were to look within the district in terms of conservation you would have to look at the potential for what can be done with the ditches which bring the water from the river to the farms. The other thing that is really key in the delivery system from the end of Mason Valley to Walker Lake, is an area where there can be some significant things done to help get water to the lake much more efficiently than it does now, particularly in wet periods.

Chairman Close asked is it true that the Irrigation District does not charge people for water because they have an allocation of water that comes from the river and so there's no charge for the use? Is there anything that you can do to encourage conservation recognizing the fact that if I don't use all of my water this year on my ranch I might lose it next year because of the State law? Is there anything that can be done to encourage its conservation short of risking somebody losing their water rights?

Mr. DePaoli answered I have a ranching background and I've done some irrigation. Irrigating isn't that much fun so it isn't the ranchers' goal to irrigate more than they need to, when they don't need to. Their mode of doing things is to grow a crop and to grow the best crop that they can. You hear a lot about we ought to go to some sort of pricing method that has an inverted rate structure that charges people for higher rates for the more water they use on the theory that that's going to cause conservation. I think when you're in the agricultural business there's plenty of incentive to conserve as much as you can to begin with. If you go overboard on that what you're doing is you're really encouraging them to do things that they wouldn't do in the growing of crops. You're, in effect, penalizing them for doing what they need to do to irrigate their crop the right way.

The Walker River Irrigation District is somewhat unique in terms of irrigation districts around the State in that we don't have a common bundle of water rights for all of the people within the district. It's different from Pershing County in that sense. It's different from TCID in that sense. Some of the people within the district get all of their

water strictly from direct diversion rights out of the river system which is not part of the stored water of the district. Some have their rights supplemented by stored water and others have no water right except stored water. In addition to that you have groundwater. So it's difficult for the district to impose pricing mechanisms or other kinds of mechanisms like that to encourage conservation. I'm not sure that is productive. I think if there's a direction for the district to look in terms of conservation it's at the transportation system from the river to the farm.

Commissioner Dahl stated I would just like to address that aspect of saving water and the areas that appear to some people to be areas where water is being wasted and the importance of those areas to wildlife, in particular. I live in Star Valley which is a valley that's irrigated from water off of the mountain. I've seen people move into Star Valley who were from another area who aren't familiar with the way that ranching has been done there for a long time and some of them have been quick to go in and decide, "Well now we need to get the willows out of here because they take a lot of water and we aren't able to hay that area." We need to dry up some of these slews and get those where we can put up hay and it becomes a pretty sterile area when that happens and to the detriment of wildlife which is a resource that I think is important that we're trying to save. So, I agree. I think that getting the water from the river to the fields is an area that we may be able to concentrate on to save some water. But as far as changing practices out there, I think we want to be careful about what we might suggest.

Chairman Close called for further questions.

Commissioner Ricci stated mine is more in the form of a comment to a couple of things that have gone on this morning talking about waste and want, conservation and whether bettering efficiencies can create water to go down stream. I'm going to use the example not of the Walker River here, but one of which is under the jurisdiction of the State Engineer and that being the Humboldt River Decree. The Humboldt River Decree has an allocation of more than 600,000 acre feet to be delivered under full allocation. The river system produces at Palisades on an annual average basis about 280,000 acre feet and in Imlay about 240,000 acre feet. So what you see there is what one person may conserve, another person can use downstream. I'm not going to speak for the Walker River Irrigation District on how their practices are, but generally what happens in a decree is that you end up with more acres to be irrigated than you have water in which to do so basically on an average year and only on a year where you have more than an average precipitation or runoff that you have enough water to fully give all the water rights to those that are allocated. So, you've got to be careful when you say, "Well you know conservation is going to be able to get more water some place else," because it may never get there.

Comm. Crawford stated I had a quick question for staff. If the sliding scale can be regulated and is measurable on TDS, is that something that can be practically dealt with?

Tom Porta introduced himself as being with the Division of Environmental Protection. He stated the scale is measurable. We can monitor that. This proposal was brought to us about a week ago and we looked at it. At this point in time we do not support it and the reason we do not support it is the fact that it potentially brings the fish to the brink and setting a standard that does that is not protecting the beneficial use. So at this point in time while we think it could have merit, it's just a theory right now. Also, we would have to investigate further whether these springs exist and whether or not the fish congregate there because the TDS is lower, because of water temperature, or do they congregate there because of something else? We simply don't know the answer yet to really stand behind the scale.

Mr. DePaoli stated I would like to add to your record four documents that Entrix relied on which are referenced in the presentation today.

Chairman Close stated if there's no objection those items will be for our evidence.

Mr. DePaoli stated one is "The Effects of Increasing Salinity on the Pyramid Lake Fishery." The other is the Dickerson Vineyard study on the effects of high levels of TDS in Walker Lake. The third is a field trip report, February 23, March 21, 2000 prepared by Chris Drake and the last is "The Biology of Walker Lake" by Craig Stockwell.

Chairman Close stated those will be accepted. He called upon Kelly McGowan.

Kelly McGowan introduced himself as the resource specialist for the Mason and Smith Valley Conservation Districts. He stated we believe that to set a standard on Walker Lake at this time is premature. We have heard no evidence that under the current conditions and operation procedures that a water quality standard of 10,000 mg/l can be met. We have heard a lot of "if" scenarios, some of which are currently in place. Cofferdams, water acquisitions, river clearance and river restoration, cloud seeding, groundwater pumping, and conservation practices. These may all eventually lead to a reduction in the TDS levels in Walker Lake. To assume that any or all of these measures will take place is certainly premature. Therefore, under current historical climatological data, one can assume that the proposed TDS level is unachievable until funding as well as on-the-ground practices are followed-through with.

In the 1983-84 water year the TDS levels either reached or were below 10,000 mg/l. It's also important to keep in mind that 1982 and 1983 water years were the two wettest winters in recorded history and I'd hate to think that we're going to hang our hats on the probability that it will occur again, it will occur soon, and it will occur frequently. At this point in time we believe the only changes in natural climatological conditions in an upward trend could possibly meet the standard under current operating procedures. The problem has been going on for well over 120 years. Unfortunately, you guys have the unenviable task of trying to decide the fate or the standard in the course of two meetings and that is our position at this time.

Chairman Close called for a lunch break at 12:40 and reconvened at 1:45. He called for further public comment. Since there were none he called the public meeting to a close. He moved to adoption of the exhibits. Since there were no objections, the exhibits were adopted as part of the record. He called for presentations by the staff.

Mr. Porta stated I don't think we have anything further to add other than if your deliberations you have any questions we'd be happy to answer.

Chairman Close stated you very briefly mentioned that you did not accept the sliding scale. I think that was a very extensive presentation that was made this morning. Tell us the reason why you don't want to consider that.

Mr. Porta stated the theory is very interesting and the information that was presented was based on observations but no really hard data yet. We think it has merit; however, it will take a couple of years, possibly longer, to verify that these special habitats exist in these certain areas that when the TDS level gets high enough the fish can go to these areas to survive until the TDS goes back down. The other reason we do not, at this time, accept that is we have scientific data, reports, and the recommendation from NDOW that to protect the beneficial use the number is at 10,000. From that standpoint that's what we feel scientifically we have the basis to stand behind.

Chairman Close stated at our last hearing you asked your question relative to the consequences of not adopting a standard. I'd like to have you expand on that if you would and explain to us all of the benefications of doing

something or not doing something.

Mr. Porta stated let's take the first scenario of not adopting a standard. Right now if the standard was not adopted today, there's no trigger, if you will, that a hammer is going to come down on us and something is going to happen. Each year we let the Environmental Protection Agency know what standards we are working on and which ones we will try to revise by the end of that year or in the coming year, a schedule if you will. They know that the Walker has been on our plate for the last two years. If we fail to adopt a standard, potentially if the EPA determines that it's in their best interest or there is a priority in this issue, they could go forward with adopting a standard and putting it in the federal regulations which I think would be unfortunate because then it takes it out of our control and places it at the federal level. But as it stands right now there's no trigger, nothing is going to happen and it would be pure speculation as to lawsuits or whatever if we don't adopt a standard. If we do adopt a standard let's say other than what the Division has recommended, the EPA still has to review our standards. They could potentially change that again at the federal level if they saw that it was not protecting the beneficial use and it's up to them to decide. They have to review all of our standards. A recent court ruling in Alaska made that more, I guess, understood that they do have that authority to do that and they can. So, again, everything at this point is pretty much up in the air and there's no real triggers either against adopting a standard that something would happen, or if we did do something another hammer would fall.

Chairman Close asked is there anything that you can think of that you can do to increase the flow into the lake? They talked about improving the stream bed from Mason Valley to Walker Lake and things of that nature. Regardless of what happens today, do you have any plans to encourage any activity that would increase the flow to the lake?

Mr. Porta answered I think this is fascinating that we're here at a point that people are actually talking about saving the lake. Before we even proposed a standard there was none of this talk going on. A lot of ideas have come up: the cloud seeding that we mentioned, the straightening of the channel. Certainly we would be engaged and would want to work with all of the parties involved to try to see if there can't be a solution that's reasonable and not going to be to an economic detriment to one side or the other to try to get flows to the lake. There are a lot of alternatives. But the key point is that without a standard or without a goal nobody knows how far to go with how much water should get there. You have to have the level before you can make a decision on how far you need to go by getting more flow to the lake if that's a choice that's done.

Commissioner Johnson asked if we accept the recommended 10,000 and after adoption we don't meet that, what happens?

Mr. Porta answered the EPA has recently passed new TMDL rules, as many of you have heard. These do not take effect until October of this year, barring any intervention by the Bush administration, which I don't think there'll be too much consequence from that. What happens is once a body is listed as impaired, in this particular case, the TDS isn't coming from the river, it's not a pollutant like a metal coming down the river causing the impairment. The impairment is caused by lack of flow. I think we all can agree on that. Under the new rules we would have to list the water as impaired, but there's no direct measure that would require us or anyone else to take a corrective action or develop and an implementation plan the way I read the rules today. We would have to list it as impaired and the only thing that we would do, as I mentioned last time, is we try to focus efforts, our activities in the Walker Basin, either through our federal funding 319 to help the situation probably channel improvement, that type of activity. So if it does go on the impaired list it's not a bad thing. A lot of our standards do not meet the standards all of the time. There are exceptions. We have flood events. In '97 obviously we had a lot of turbidity going down the Truckee and all the other rivers in the system. They were not meeting water quality standards. So I would say that being on the impaired list is not that bad a deal. It simply means that we need to work harder at trying to reach our goal of meeting

beneficial use.

Commissioner Johnson asked how many and in what stretches of the streams in the State are presently listed as impaired?

Mr. Porta answered according to our 1998 305B reports, which is what we have to get to the EPA, right now about 7 percent of our streams are listed as impaired. In comparison to other western states, it's between 8 and 12 percent of their waters are listed as impaired.

Commissioner Johnson asked could you be specific and identify some? Is the Carson, is the Walker presently listed?

Mr. Porta answered almost every river system we have in the State has at least one, if not two or more parameters that show impairment. That's not for the whole river stretch. It may be for just certain portions. So, every river system, the Carson has impairment, the Walker, the Truckee, the Humboldt system has impairment and we're working hard to try to resolve some of these issues.

Commissioner Johnson stated I'd like to follow up on what happens if we don't set standards. It's my understanding that there's a person representing the federal EPA in the audience. Is that true or not? Could we hear from you?

Stephanie Wilson introduced herself as being with the Environmental Protection Agency out of Region IX, San Francisco and based in Carson City. She stated Tom is correct. If the State does not set standards or if we determine that the standards that are set are not protective of that water body, the EPA can come in and promulgate standards for that water body.

Chairman Close asked so if you do, then what? If you've set a certain TDS standard that can only be met by water flowing into the lake then what would be the consequence? What would happen?

Ms. Wilson explained well we would make a determination similar to what the State would have to consider. What could be done to solve that problem and is it reasonable and can it be achieved and then we would determine what kind of action we could take.

Chairman Close asked including what? Can you give me some ideas as to what action you might take that we cannot take in order to increase the flows into Walker Lake? Maybe you haven't thought it through that far, I don't know.

Ms. Wilson answered no, we haven't. We would first set the standard for the State and then ask to State to implement those standards and take the actions that they would take if they had set the standards and then if that wasn't adequate then we would look at what could possibly be done in addition. But we haven't even come near that.

Commissioner Dahl asked would the decision that you make of what you might require may be determined by some group that might sue you to require you to do a certain thing. So that might not be a decision that you would make at the EPA? This might be a decision that a court would make.

Ms. Wilson answered the decision as to whether or not we would step in and promulgate, yeah we could. It could be a decision that we would be forced to make.

Commissioner Dahl stated right, not just that, but what you would do after you stepped in, what actions you would

take? What would you require?

Ms. Wilson answered we would look at the information available and make our decision and then we would be subject to suit too if some group thought it was not protective and we would have to defend our decision as well. But we wouldn't make our decision based on somebody telling us what to do. We would look at the information available similar to what the State does.

Commissioner Ricci asked does the term "take appropriate action to ensure that the water quality standards are met" does that indicate any condemnation of existing water rights?

Ms. Wilson answered no, we don't have that authority.

Commissioner Ricci asked can you impose that upon the State in which to do so?

Ms. Wilson answered no, we do not regulate water quantity.

Comm. Crawford stated Mr. Chairman I actually had a question for Tom. Is there a process for regular review and possible reconsideration of standards? Does it happen every so many years?

Mr. Porta answered yes it does, every three years. It's called the triennial review and that's why we're proposing these standards for you today. This water came up for the triennial review and we had proposed changes so that's why it's before you today under that requirement under the Clean Water Act.

Comm. Crawford stated I seem to remember some discussions about temperature standards at our last meeting and some concern about the 1 degree temperature difference in the standard between the confluence and Weber.

Mr. Porta explained there were point source discharges that could impact the lake and change the temperature which could affect the fish. When you see that delta "t" or the change in temperature, that's primarily what it's for. So, a point source cannot have influence on the temperature of the natural water body.

Comm. Crawford asked but the temperature difference in the standard between the confluence of the two forks of the river and Weber Reservoir was only higher by 1 degree at Weber?

Adele Basham introduced herself as being with the Division of Environmental Protection. She stated that's one of our proposed changes to make it consistent between the downstream below Weber Reservoir to the reach above Weber Reservoir. There's a 24 degrees and we're proposing to make it 23 to be consistent with the other reach.

Commissioner Iverson asked what is pollution trading as a tool for TMDLs?

Mr. Porta answered we're looking at this very issue in the Truckee Meadows right now. When a water body is listed as impaired we have to develop what's called a "maximum load," a pound per day, for that pollutant. In the Truckee we have it for nitrogen. The nitrogen was causing low a dissolved oxygen level which was affecting the fish. We then set a limit on the amount of nitrogen that can be added to the Truckee system and not cause this problem and it came out actually in a pound per day. We then take that number and put it back on the point source, in this case the Truckee Meadows Wastewater Treatment Plant, to meet certain discharge in pounds per day of nitrogen, the maximum that they could meet and that includes a background level or nonpoint source contribution as well.

So you would have, let's say, 500 lbs. from the background and 500 lbs. from the point source. What's happening now in the Truckee Meadows is with growth they need more capacity to discharge. So they have to look to that nonpoint source side to get the offset. So what the Truckee Meadows is considering right now is looking at controlling nonpoint source pollution from either storm water runoff, potentially other types of runoff that nitrogen that's being added to the system that they can control through nonpoint source and then they would get credit then on their plant for discharge. Now, it wouldn't be a one-to-one. So if they came over here and cleaned up 50 lbs. of nitrogen most likely we'd probably give them a 1.5 to a 1, somewhere in that neighborhood. So for every 50 lbs. they clean up we might give them an extra 25 lbs. on the discharge. It would actually be put in the NPDES, the permit for their discharge, about this pollution trading mechanism.

Commissioner Iverson asked are there any possibilities with Walker and upstream systems for that type of a program?

Mr. Porta answered if we do establish a TMDL, there are TMDLs on the Walker right now for phosphorus as one of the pollutants. If we could identify a point source contributing to that, then yes we could. But right now there's no point source discharge to the Walker system.

Commissioner Dahl stated as I remember last time in Yerington at our meeting, were we told that in order for the Lahontan cutthroat trout to spawn that the water in the lower reaches of the river needed to be 21 degrees Celsius or lower. Wasn't there a temperature that it needed to be?

Someone from the audience answered, but it was inaudible.

Mr. Porta stated our proposal today is just for juvenile and adult cutthroat trout which is similar to the language that the Irrigation District has posed about put-and-take. That's essentially juvenile and adult trout. It's not spawning trout in the lake.

Commissioner Dahl stated it wasn't a question, it's just a "what if." Since the LCT is on the threatened list, if the water were required to be at a certain temperature for them to spawn and they weren't able to spawn because we weren't reaching that temperature, then do we have a conflict between if this standard say were adopted by the EPA, don't we have a conflict between what do we do in order to make it possible for the trout to spawn?

Mr. Porta answered yes, and we face this issue on some of our river segments and what the remedy is is shading, providing willows along those river corridors such that there's cool deep pools for the fish to spawn in.

Commissioner Dahl asked what about those years when there isn't water to shade?

Mr. Porta answered in those particular cases I think the standard would probably not be applicable when there's not enough water.

Commissioner Dahl stated then somebody would be able to make a pretty strong case in order to comply with the Endangered Species Act that somebody's going to have to release some water to put into the . . .

Mr. Porta stated right. It wouldn't come from us, it would come from some other outside influence if they felt that was in their best interest.

Chairman Close asked do I understand correctly, Tom, there can be two motions on this matter, one dealing with the Walker River, one dealing with the Walker Lake?

Mr. Porta answered yes. We tried to separate them out, but it's part of one river system. You could act on the river itself and delay the lake if you so chose. That's your option. Or propose some other type of motion on the lake.

Chairman Close called for further questions. Since there were none, he closed the hearing. He called for action by the Commission.

Commissioner Dahl stated this is one of those instances when you wish that everybody could have what they want and I wish that we could always have Walker Lake and that it weren't a terminal lake because in Nevada where we are so dry anyway you just hate to lose any body of water. I was raised along the Humboldt River and when they first started talking about making the Humboldt River fishable and swimmable we used to say, "You know there aren't any fish that can live in the Humboldt except the carp and they have to go up a tributary every time they need to get a drink." I wish that the Humboldt River could be like some of the rivers that we have in Montana and Idaho, but it's not. I think if anybody wants more precipitation or wants the most possible, it's ranchers and farmers because that's what you live by, you know, you live by the market and you live by precipitation. You have absolutely no control over either one of them, but you wish for it. If you set a standard for your operation that depends on a certain amount of precipitation every year which is higher than what you likely will get, you won't be in business very long. Sometimes I think we have to face our "can do" and our "want to" and in this situation I think that there are some good ideas that have been floated here today.

I think there are some productive possibilities, some things that may be able to be accomplished to enhance or at least lengthen the life of the lake. But until we know what those are and until we have them in place and until we know that we can reach a standard that we set, I think it would be a mistake to set a standard. I think that we could set goals. We could say, "These are the goals that we would like to reach." And we could try for those and then if we are able to reach those goals then we could make those goals standards. But I think that it would be a mistake to set a standard that we are not going to be able to reach and so I'm going to vote against setting a standard.

Commissioner Ricci stated this issue right here goes far beyond I think just whether we set a standard or not mainly because of the litigation that the Division of Water Resources and the Department of Conservation and Natural Resources is involved with the Walker Lake Working Group in Mineral County. In fact, last week we were before the Nevada Supreme Court arguing against the Writ of Petition, a petition for Writ of Prohibition and a Writ of Mandamus. The prohibition was for the State Engineer to stop issuing any permits for both surface and ground waters anywhere within the Walker River system and the Mandamus, or the mandate was that we get more water to Walker Lake. That means us - the Division of Water Resources and Conservation and Natural Resources. There are any number of people out there right now doing all kinds of studies on how to get more water to Walker Lake. BLM is doing an Environmental Impact Statement right now as to options of getting water to Walker Lake, which includes water banking, water transfers, out right sales and all of that leads me to think that if I vote for stating there's a standard that can't be met, it just seems to defeat the argument that I had when we argued that we can't do anything under the Writ of Prohibition or the Writ of Mandamus to get additional water to Walker Lake. So, I'm kind of in this in between state here, so I believe that what I'm going to do is I'm going to abstain from any vote on this particular standard.

Comm. Crawford stated although we've talked a lot about some of the politics in this State and I was born and raised

in this State, grew up in Yerington and spent a lot of time recreating at Walker Lake. I now drive where I used to fish and water ski. I used to catch Sacramento perch out of that lake. They haven't lived there for more than 20 years. Now we either have lost or are about ready to write off the Tahoe sucker. I've worked a lot on the Walker River system and it is a beautiful system and I think there's some things that we can do for the system itself and I think we need to hold our feet to the fire a little bit in order to do that. We like to talk as Nevadans about, "You feds stay out of our business" and here we have the opportunity to manage our own business and we're not going to show the responsibility to take that on. It's this Commission's responsibility to make sure that we have water quality standards for the various waters in Nevada and to not do that for the benefit of all of the citizens of this State would be irresponsible. I guess for the sake of further discussion getting this off dead center maybe we can see where we're at on this if you would accept a motion, Mr. Chairman?

Chairman Close stated let me first see if anybody else wants to make a comment and then surely we'll take your motion.

Commissioner Iverson stated I'm sure everyone knows my concerns. I've expressed them for two meetings with the agricultural industry that can be impacted. We've heard some very emotional testimony and we've heard some testimony from some ranchers out there who have lived through this type of issue before. Mr. Dahl makes a good point, we're looking at standards that we are not going to be able to meet and I have a real problem in serving on this Commission and voting for standards that we can't meet. The other thing that I have a real problem with is we do have some responsibility for water quality, but as Nevadans we also have some responsibility as far as our rural communities and our economic base and our diversification and as Mr. Fulstone said this morning, we're talking about a half-a-billion dollar industry in Yerington. We're talking about an industry that's 20 percent of the agriculture in Nevada. We're talking about an industry that's a very progressive industry.

I've heard some really positive things this morning, some ideas that maybe we need to look at. I wish we had another year that we could take her fisherman stories and put some probes down there and some scientific instruments down there and determine whether the fisherman in Walker Lake knew what they were talking about, about these springs where the fish are. I do think we do have some smaller environmental areas out there that maybe provide us some opportunities. But when you look at the whole system, I think it's a really difficult decision and therefore when the vote does come I'll have to vote "no" on this also.

Comm. Robinson stated I've had occasion to be involved in regulation in the past, although I'm new on this panel. But at the federal level and the state level, I've had a lot to do with the Endangered Species Act. I frankly haven't seen one tougher than this one. It's a really close call and I think staff has done a good job with their proposal with what they've got and what they can answer to and speak to with certainty. But I think the situation is we generally all agree on what the problem is, but when it comes to the remedy and will that remedy fix the problem. I don't think we have the answers to that. And maybe even more significantly, we don't have the answers to the impacts of the folks involved and of the general welfare involved. So, without more answers to those specific questions, more specificity and without exploring other ways, I'd have to come down to a "no" vote also.

Chairman Close called for further comments. There were none. He called for a motion.

Comm. Crawforth stated as I mentioned, I grew up in Yerington and I know an awful lot of people that are involved in the agriculture industry and I would be the last person to jeopardize the economic well-being of any of them as individuals or as an industry in general. But I think we can do this and I would move that we accept

Petition 2000-10, Regulation 104-00 as presented by the Division of Environmental Protection with the exception that the TDS standard for Walker Lake be set at 12,000.

Commissioner Gifford seconded the motion.

Commissioner Johnson stated I personally think that 10,000 is appropriate. That's based on the science that was presented. I'm optimistic that the various proposals that have been put forward contingent upon funding, whether it's stream channeling, rain enhancement, precipitation enhancement by the seeding, various other methods of conservation and perhaps selective willing buyer, willing seller transfers of water based upon some economic parameters, the goal can be met for even the 10,000 and perhaps even lower standards than that. We've heard a discussion of a proposed dam in the lake which, is technically feasible. It's a matter of generating the money. So, from the matter of reaching any of these standards technically it can be done and I will support this simply because I do not see this as being harmful to the agricultural community, the communities in the business activity associated in Fernley. I think this Committee also has an obligation to consider the economic benefit and the well being of the community in Hawthorne in Mineral County. There's a balancing between those two and a responsible position would be to begin the process of finding the solutions. According to testimony, there are listed bodies of water in the State now. The Walker River is one of those. Simply setting a standard and having it be exceeded will not drive the things that many people here fear. I would welcome a review of the standard. It's not my intent to see things go beyond willing buyer, willing seller, no mandates, no eminent domain exercises. I have not heard any measure group in the environmental community speak in those terms and I'm certainly not speaking for the Walker Lake Working Group, but I think appropriate action taken by people of good will can resolve many of the issues. I don't think there's anyone in this audience that wishes to see the fishery or the environment in Walker Lake to be ended. Certainly without action and based upon the history of the last 10 years of people talking about it but not taking action, and more particularly not generating money to do the things that need to be done in the engineering standpoint, we can reasonably expect in the future there will be any change if we don't set standards.

Commissioner Gifford stated the two sessions we've had have been extremely interesting. From my perspective it's been interesting in the sense that there's been a lot of discussion about where certain levels ought to be, certainly TDS being the big one, chloride perhaps to a lesser extent. Yet, in terms of the initial starting point of the assignment of beneficial uses for the lake, I can't say I really heard anybody argue against those. It was just where do we need to be in terms of a starting point for some of the parameters that reflect on the beneficial uses for the area. So, if we're going to retain the beneficial uses, as a Commission I think we're obligated to start somewhere where those beneficial uses have a fair chance to play out, to have a chance, if you will.

I think the motion as given at 12,000 is a bit high in terms of where some of other recommendations have fallen. Some have been clear down around perhaps even 5,000. I think the 12,000 at this point, which based on the data that's been presented, if I remember right, 12,000 is a bit higher than it is right now. Right now it's around 11,400 or 11,500. So, perhaps that's a good place to begin. Again, it's awfully close to that threshold value of 14,000 where things start to collapse. But as a starting point I'm certainly willing to go with that and therefore would be supportive of the motion. I would like to offer an amendment and that amendment would be the sentence tacked onto the standards of water quality for Walker Lake and that sentence reads, "Because Walker Lake is a body of water without a natural outlet, the Commission recognizes that water quality can be significantly impacted by climatic conditions and, thus, that attainment of standards may not be achievable at

all times.” I feel that, in my opinion, sort of negates what we’re trying to do up here. So, as an amendment to the motion I would move that sentence be struck as part of the motion as given.

Commissioner Johnson seconded the motion.

Chairman Close called for further discussion.

Commissioner Johnson stated if we’re going to go to the vote I would ask that the primary mover accept a second motion that would be to accept the recommendation from the Walker River Irrigation District on their proposed change on Section 2 adding the words “. . . or by applicable Court decree.” I think that’s appropriate that should be there.

Comm. Crawford stated I would agree with that Mr. Chairman.

Commissioner Gifford seconded the motion.

Chairman Close asked the motion is you’ve made 12,000 as the TDS and you are accepting the proposed language in Section No. 2 relative to applicable Court decree?

Comm. Crawford answered yes.

Commissioner Coyner stated there are three changes.

Chairman Close stated well that’s another motion. We had three motions on the deck, two motions now. Do you accept the second motion also relative to Subparagraph b? As you recall, I think Fred wanted to strike that language from the staff’s presentation.

Comm. Crawford stated I understand that motion and I concur with it. My concern would be if that gives everybody a “warm fuzzy” that we can work through some of the other standards would be my concern in taking that out. I don’t think it adds anything so I would agree with Commissioner Gifford on that. But I don’t know how everybody else feels about that.

Chairman Close stated you may want to have a vote on that motion.

Comm. Crawford stated yes, I would accept it.

Chairman Close asked so do we all understand now what the motion is? We’ve accepted the two proposed amendments to his motion.

Commissioner Dahl asked could you start from the beginning?

Chairman Close stated we’re going to accept staff’s recommendation, change the TDS to 12,000. We’re going to eliminate the language dealing with because Walker Lake is a body of water without a natural outlet, the Commission recognizes that water quality can be significantly impacted by climatic conditions and thus attainment of standards may not be achievable at all times. So his motion is to eliminate that language and to add language dealing with the water, which is proposed by the Irrigation District which read, “Water

standards established by NAC 445A.070 to 445A.348 must not be construed to amend, modify, or supersede rights to quantities of water which have been established by the State Engineer or by applicable Court decree.”

So that would be a part of your motion?

Comm. Crawford answered yes.

Commissioner Dahl stated I think these kinds of things out on the ground are often decided in court, not by the people of good will who have met here today. I think that even with the change from the 10,000 to the 12,000 increases that likelihood and decreases the opportunity of solving or at least helping the problem by new initiatives, new things that have been talked about here today. So, my position hasn't changed.

The motion carried.

Chairman Close moved to **Petition No. 2001-06.**

(**Petition 2001-06** is a temporary amendment to NAC 459.952 to 459.95528, the chemical accident prevention program. The temporary regulation adds new provisions to incorporate explosives manufacturing into the program, to add construction permit requirements for new chemical and explosive facilities, and other minor technical amendments to the regulations to reflect statutory amendments to the list of regulated chemicals. Facilities that manufacture explosives or ammonium nitrate/fuel oil for sale will be subject to the requirements of the program. A fee structure to regulate explosive facilities is established.)

Mark Zusy introduced himself as being with the Chemical Accident Prevention Program within the Bureau of Waste Management. He stated I'm here today to talk to you about some proposed temporary, regulatory modifications to the Chemical Accident Prevention Program regulation. I mentioned at a previous hearing that we had in April that we were going to be coming forward with these amendments. The one thing I just wanted to note, it's a really thick heavy package. Really, the first 17 pages are new and the rest of it is essentially minor amendments to the existing regulation. So it is not going to be as time consuming as you might think.

We're going to be going over the purpose of the proposed regulatory modification. We're going to get into issues related to what we did in terms of development, how we involved the regulated community and I'm going to talk a little bit about coordination. There's a considerable amount of coordination that has to be done for some of these things. Then I will get into the regulation in detail and I'll primarily be focusing on the new stuff in the first 17 pages or so. In your packets that you received there was a summary of the amendments. So if you had an opportunity to see that, or you wanted to look at that you could see basically what the amendments are about.

The primary driving force for these regulations was to implement some regulatory amendments that were mandated in the 1999 Legislative Session. Two of those were related to the Clark Commission. If you'll recall, the Clark Commission looked into regulatory practices related to explosives manufacturers and other highly hazardous chemical manufacturing companies throughout the State. They came out with numerous recommendations including some things that required statutory amendment. Two of those, as related to the Chemical Accident Prevention Program, are incorporating explosives manufacturing into our program. So, basically bring these people into a program that already exists and have them comply with the requirements we already have in place. The second issue was the addition of a construction permitting process and I'll explain that in a little bit more detail when we get into that. That's really where we're going to spend the bulk of this presentation because that's the meat of the amendment, really. There's also something that's a little bit more minor and we're amending the list of highly hazardous substances. There's a

statutory list of chemicals, we're pulling some of those forward into the regulation just to be consistent and I'll spend a little bit of time explaining that.

Chairman Close asked does this relate to fireworks?

Mr. Zusy answered yes.

Chairman Close recused himself from the meeting because he represents a fairly significant fireworks seller in Nevada. Vice Chairman Coyner conducted this portion of the hearing.

Mr. Zusy stated technically, incorporating the explosives manufacturing and the construction permitting could both impact fireworks manufacturers. There's also some programmatic amendments. We're making some clarifications to the existing program. We did a pretty extensive regulatory modification in 1999 and there are certain things that we saw the need to get in and either amend or clarify. So we're doing that here. Also, we're doing some things to improve the function of the program.

Current program - we currently have about 29 facilities that are subject to both an accident prevention program, it's a proactive program doing positive things to prevent accidents, and the emergency response program requirements. We have another 11 facilities that are subject to our program that are only really required to focus upon having adequate emergency response programs in place. The big point to make here is that the current program applies after startup. So once they bring materials on site and they start operation they're subject to our program. You'll see that that's going to change with the new regs.

Regulation development and outreach - we started working with the building officials preliminarily in the first quarter of the year 2000. We followed up in the second quarter, tried to understand what local building officials did. We're very interested in ensuring that we don't have overlap. We're going to be getting in and doing some permitting. So we wanted to coordinate with these people. In the second quarter we coordinated various activities. We proposed the CAPP regulation and did a workshop notice on the Website in September 2000. We contacted more than 250 prospective, or interested parties. They're not all prospective regulated facilities. Workshops were held in October. We had eight people in Carson City attend, 12 in Las Vegas, none in Battle Mountain. We had comments from three organizations.

We did quite a bit of work with local building officials, building departments, Washoe and Clark Counties, primarily, and some smaller counties. Also local fire departments, Clark County and Henderson, primarily, because that's really where a bulk of the industry is. There was another organization we use, the Nevada Organization of Building Officials. They are an association of all the building officials throughout the State. We distributed questionnaires through that organization to understand the types of things they permitted, the types of codes they enforced and we got responses. So we wanted to get familiar with what they were doing and we took that into consideration when we developed our reg. But it was important to avoid overlap.

In terms of regulation, now we're going to get into the regulation review. The first thing we're going to talk about is the permit to construct and commence operation and I'm going to talk from the slides. It starts on Page 2 of the regulation. Generally, the permit to construct and commence operation has three major purposes. We want to ensure that the facility has done what they need to do to mitigate off-site consequences. Off-site consequences would be things that would happen as a result of a hazardous chemical release, an explosion within a plant, so that's one thing. The second thing is to ensure that there's adequate emergency response for each of these new plants as they are built.

The third one is to ensure that our accident prevention program is in place before they actually start up. The idea here is that it's easier to do this on paper before they start building things than to come in and retrofit at a later date. So, that's what we're looking to do.

The Chemical Accident Prevention Program is a proactive program that requires facilities to do things like evaluate the design parameters of their plant so that they know what they are and they operate within them. We have prescriptive requirements for things such as developing operating procedures, training programs, maintenance programs in chemical industries that handle hazardous materials. We also review their emergency response coordination and ensure that these plants are coordinating response activity with local responders like fire departments. So that's what the existing program does.

Now we're getting into some of the specific parts. There are actually two parts to this permit. There's a permit to construct, so to build the plant. Then there's a permit to commence operation. It's just like a building department giving a building permit and then getting a certificate of occupancy to actually get in and occupy the building. That's the best analogy I can draw to that. Those two things are defined on page 12. The first part of the process would be a pre-meeting and that's on page 3, section 13. Basically, what we're doing there is working with the plant to define the project and the scope and determine the actual items that need to be submitted. Also, we are going to include the local building officials there to see where we need to coordinate activities.

Then there's the application form which starts in section 14. The application has all the information we need to evaluate the facility design. All the things that they are submitting to us through this application are not necessarily the things we're approving, but all of the things that they do give us support evaluating some of the elements. We're looking for things like location, staffing, substance transportation, (inaudible) those things kind of tie to emergency response for example. A select PSI is Process Safety Information, design information, process hazard analysis, a hazard review and then we have select drawings, specs and calculations. The other thing we're looking for is the conditional use permit. This is something that I don't know if you're aware of, it's related to local planning agencies. In the '99 session one of the things that came from the Clark Commission recommendations was the requirement for facilities that were going to have substances that were actually in our program, the CAPP program. The kind of substances we're talking about are things like chlorine, ammonia, for example. If they're going to have those materials, they need to get a conditional use permit from their local planning agency. So, that requires that the plant go through the hearing process. There are also requirements that we get involved at that level that they consult with us. We can do things like provide information to help them make an informed decision. For example, bring up information about potential release scenarios, ask questions about emergency response capability. But what we're going to want to see when we get this application is that conditional use permit has been granted by the local authority and see what those conditions are.

In our discussions with the regulated community one thing did come up toward the end. There was concern on the application related to trade secret and confidentiality. We did put some language in our regulation to protect trade secret information. Some facilities have requested that we at least give ourselves an option to review some of that trade secret data at the site rather than bring it to the facility, even though we will protect it. So, we did a minor amendment to section 14. This is different from what's in your packet. It's just the part that's highlighted on the side and it's underlined. We're just saying that at the discretion of the Division, select application elements may be reviewed of the owner or operator's facility. That's just to give us the flexibility to do that. There's a genuine concern that some things are very sensitive and companies would feel more comfortable with those not leaving their sight.

Commissioner Johnson asked does this amendment in any way change the public's right to know or access to information of risk?

Mr. Zusy stated no. Well, they won't see this trade secret information. Even if we had that in house we would be protecting that. We would not share that with the public. Everything else that we have, though, is open to the public and you'll see that we actually make certain things specifically available to the public and to direct their attention to during this process.

Commissioner Johnson asked in this amendment we're simply talking about the physical handling of the trade secret information that's prior determined?

Mr. Zusy answered yes. That's why it's there. That's what it's intended for is to address the trade secret issue. The next step once the application has been delivered is just a completeness review to ensure that all the documents that we need have been received. We are committing in that section to a 30-day turnaround. Obviously, that's a function of the complexity of the process. We may be able to do that quite a bit quicker for simpler operations and I'm hoping that pre-meeting will enable us to get through that fairly easily because we should be able to define exactly what we need to see.

The next section is the submitted process safety information and process hazard analysis and that is on page 5. It's basic information about the materials, the process chemistry. So we're looking for information about the hazards, the physical properties of the substances, how it reacts, what kind of side reactions happen unwanted or normal, what kind of contaminants are in the system. We want to know about the operating control logic. We'll ask for select equipment and instrument information, material and energy balances, a description of their safety system and then the process hazard analysis. The process hazard analysis is a systematic way of evaluating the mechanical operation of a plant to see if there are any unmitigated hazards. They look to see what types of things can possibly go wrong and if they can define those they want to ensure that there's something in place like a safety system, an alarm or a shut down that will prevent that from happening. So, a lot of the information that we're getting, under the process safety information, supports our review of that process hazard analysis.

Submitted drawings - the first one, the site plan is just an overall drawing that locates the facility on a very rudimentary road map. It puts information like neighborhoods, hospitals, schools on there. So it shows the proximity of these things to the plant. It will be used to demonstrate the release scenarios. How far can toxic chemicals spread during different types of releases, you know, look at things like chemical transportation corridors. A lot of this information is going to be used in evaluating the emergency response plan and it also will help the emergency responders. Plot plans - there's various information on the location of the equipment and the hazardous materials within the (inaudible) limits of the plant. Other things are a little bit more technical in nature, electrical drawing that locates hazardous areas. It would mandate certain electrical installations. Process flow diagrams, piping and instrument diagrams that are essentially schematics of the operation and the last one is structural, I'm talking about steel or concrete that doesn't get reviewed by a local building official and we spell that out specifically in the reg. so that we don't overlap. The reason that we're interested in that is for things like tank foundation, tanks holding hazardous materials. Somebody needs to check those to ensure that those things have been designed properly. So, we are working with the local building officials to see that gets done and if they don't do it we will take that on.

Comm. Robinson asked when you're undergoing this process, for instance site planning, plot plans, who's doing this? Is this all within the Nevada Division of Environmental Protection or are you utilizing all of these other agencies? The local fire agencies and other agencies? Is it a multi-agency process?

Mr. Zusy answered yes. That information is helping to support the evaluation of the emergency response plan and we

won't evaluate the emergency response plan ourselves in house. We have to take it out to the local responders. The issues there are what types of things can go wrong? What types of chemicals are you handling? Who can respond to that? We can't say that Clark County Fire, you can respond to that incident. They have to tell us that. So we have to share that information with them. So the various agencies will look at this along with us and we've asked for multiple sets of these drawings and documents for that reason.

In terms of specifications, we're just looking for information that defines the applicable codes, materials of construction, primarily we're focusing upon process piping. That is something that does not get checked by local building officials. Submitted calculations, any structural calculations, as necessary if we're looking at structural drawings. And pressure relief systems, which is a major issue, systems of valves and piping networks that are in place to relieve over pressure of systems, prevent rupture. So those are the types of calcs. we would be looking at.

In terms of a construction inspector, we are looking to the plants to provide these inspectors. The way a building department currently handles it throughout the State is they have their own in-house inspectors. They also have a considerable workload. They're looking at all kinds of buildings and various other structures. We're looking at potentially two, three, four plants per year tops. We obviously cannot hire a full time inspection staff for that. What we would rather do is put that requirement on the plant to provide those qualified inspectors and most would do that anyway. Things like inspecting concrete, welding, and structural steel. Then what they're doing is ensuring installation per design. What we would be able to do is go out and just require that they have those records on site and review those records.

The criteria for approval - the first thing is we approve the off-site consequence analysis. The off-site consequence analysis is just an evaluation of the impact of an accidental release of the substance. The EPA has defined toxic concentrations of material that could potentially harm the public. What the facility is obligated to do is conduct this off-site consequence analysis to project how far out that could get if those releases occur. Basically, what we would be doing is concurring with their evaluation. Most of the evaluations for those chemicals are available in a tabular format through the EPA. So that should be cut and dried. We meet to approve the construction inspectors we just talked about.

The Division needs to concur with the emergency response plan. There are two issues here. The first thing is we want to ensure that it's coordinated with the responders. It's not enough for the plant to have an emergency response plan. The fire department plays a role in that. They need to know that they're expected to do that and they need to be able to confirm that, yes, we can provide the service the facility expects. The second thing is the hazmat capability. That's hazardous materials response. That is a situation where you would have to go into a contaminated atmosphere wearing self-contained breathing apparatus, possibly chemical protective suits. That type of capability does need to exist and it needs to be provided by somebody. The way it's worded in our regulation is we require that it be provided somewhere. The facility may be the one providing that, or the county, or the local fire department. But it does have to be there. If there isn't hazmat response, there would be problems responding to some situations.

The next thing is the hazard analysis that I talked about earlier that it complies basically with our CAPP program requirements and that's that it's thorough, it's critical, it's looked really hard to find all the things that could go wrong with the process and it has corrected them.

A couple of additional things, we need to approve the site plan. This is another significant issue in the approval process. I talked about the site plan and how it's going to show different public receptors and local responders. We want to see that the worst-case release scenario has been mitigated. It's defined as the largest container. Say the largest tank ruptures, the entire content gets spilled, it vaporizes over a 10 minute time frame and disperses. That's the

EPA definition. We want to see that they're doing everything they can to minimize the impact to that release. We are not saying they absolutely have to prevent it from going off site to affect public receptors. We initially did have that and that was one of the major comments we got back from the regulated community. A couple of arguments: (1) an entire tank dumping its content. The feeling is there's a very low probability of a tank splitting open and dumping the entire content. (2) is the matter of materials vaporizing over a 10 minute time frame. Things like, for example, chlorine or ammonia if they spill they chill. They auto-refrigerate and a lot of it remains as liquid and enables some additional recovery methods. So, bottom line saying that scenario has to be used would put brand new plants either totally out in the middle of nowhere and if any type of support facility got built nearby, a contractor say, if he was in that zone, you'd be violating that. It doesn't seem practical.

So, what we are going to do is see that they do things to mitigate those releases to the maximum extent possible. We're talking about things like putting containment around the tanks, collecting the liquid so it doesn't spread out and it doesn't vaporize, possibly enclosing or taking some other steps to minimize that. The second issue is the alternate case release. That needs to be mitigated to prevent public exposure. Alternate case is really what the EPA meant to be the more likely case. We're not talking about a major tank rupture here, we're talking about things like if they're trans-loading from a storage tank to a truck or railcar, the hose ruptures. That's not nearly the same impact as an entire tank dumping their contents and vaporizing. Those type of operations need to be mitigated to the point where they do not get off site and impact public receptors. So, for example, those types of things would have to be maybe enclosed with a scrubber, depending on the chemical, some other method. We also have to go through and approve the plot plan, hazardous area locations, submitted calcs. and drawings, the submitted specs., and calculations.

There is one more thing I have here and this is, again, the result of a late comment from the regulated community. One more (inaudible) and this is the last one. And this is being made to Section 22. Basically what I did was insert some language and it's in several sections and what it's doing is really specifying, defining a little bit more stringently the criteria for our acceptance. For example, we were saying things like, "We need to approve the piping and instrument diagrams." The question was, "Well, what are you approving?" So we got in and said, "Okay, they had to be consistent with the equipment list and the specifications." So we got in and clarified each of those a little bit more. So I'm just proposing that be amended as well.

We also want to see conformance with the conditional use permit. We want to see that it was issued by the local agency and that if there were any conditions related to our process that they were incorporated.

The last item is a public review process complete. I'm going to spend a few minutes and talk about that. What we intend to do is make notice to the public once we've gone through this permit to construct phase and make notice that we intend to issue a permit. We are going to make information available to the public, of course, not the trade secret information, and some of the things we're specifically going to point to there are for example that site plan for one. The emergency response plan, CUP, and various other information on the substances and the hazards. We do not intend to rehear the use permit. I mean that's not what we're doing there and it's not there for citing. However, some of the CAPP criteria aren't being met. We would have to go back and see that gets fixed. Perhaps there are things related to emergency response that wasn't handled properly. Maybe even the fire department didn't pick up on that. The public review process may point to something like that. We want to correct those situations. Commissioner Johnson asked what is CUP?

Mr. Zusy answered Conditional Use Permit. Construction review - we are not going to provide our own construction inspectors. We are requiring that the facility maintain all the construction records on site that would likely do that anyway and to provide us with access to those records and also give us an opportunity if we wanted to witness any construction activity. Provide us some notice. Our inability to witness those things is not going to hold up construction. It's not mandatory that we be there to witness things and I've made that clear in the reg.

Permit to commence operation - basically, what they've already had in hand is a permit to construct. They're building their plant. There are a lot of other things that the facility can do while they're constructing the plant and they don't necessarily have to be done in order to say, "Go ahead and start building." What we're looking to do during this phase is verifying the remainder of the CAPP elements. For example, we'll look at things like their operating procedures, their training program. We want to see those things are developed. The training has been completed. They've developed a maintenance program. They obviously aren't doing any maintenance yet because they're not running, but at least the program will be in place. So, we'll look at the remainder of the program elements and see that it is in place and ready to go. Once that is done and we're satisfied with that portion per the criteria we've established in the reg. they've got their permit and they're ready to go.

However, we do need to talk about fees. We are given authority specifically in the statute to assess fees for these activities. Remember this is prior to their having materials on site. I have developed the fee structure to essentially have them reimburse us for cost. That is how we want to proceed with it, especially in these initial phases. I'll just point out, for example, a building department, the way they assess the fees is they get a project valuation and there are many charts and tables to do that for buildings. Basically they've done so many buildings, so many structures they know exactly what it takes to permit these things and they know how to value those projects, and they can come up with permit fees that cover their staff quite readily. We do not have that implementation experience in this type of program. So rather than try and develop some kind of fee per pump or per valve, we had to come up with another way of doing this. So I thought implementing this using just a cost per service was the right way to go.

Initially we're going to start out asking for \$5,000 and from that point forward we will invoice for additional fees up to a cap. I will note that \$5,000 initially what I was asking for was the full amount. We had caps of like \$40,000 or \$50,000 on these permits. I was asking for that up front. We were going to draw down from that. Facilities asked that we start low and then go ahead and invoice and work up. So we've done that. In terms of how we determine what the fee caps are going to be, they're based upon complexity. The more complex, the more pipes, pumps, controls there are in the system the more it's going to take to review the system. The larger the process the more it's going to take. What I based the complexity upon was the schematics, the piping and instrument diagrams. The more piping and instrument diagrams you have the more complex the facility is going to be. So, I've developed the fee caps accordingly. I don't know if you want to talk about the (inaudible). I've set it up so that the fee caps are \$40,000 for five or less PNIDs \$50,000 for 20 or less, and then \$50,000 plus \$500 for each drawing more than 20. To come up with those numbers I essentially developed a detailed layout of what I thought it would take to evaluate a process based upon my background in consulting engineering and engineering and construction and developed those caps. Those caps are adequate to cover the review process. Like I said, we need to have some implementation experience to see how this works. That's where I think it should be. The other thing to point out is that the CAPP program fees are going to be excused for the first two years. Those can run anywhere from about \$4,200 annually up to some clients were paying more than \$50,000. So, the idea there is that we are putting a lot of time up front to evaluate this plant's programs.

We're still going to go out in those plants and do annual inspections once they're operational, but it will be a lot

easier. We'll be looking just at implementation of select procedures and since they spent a lot of money up front we are going to excuse those fees. The other thing to point out is we are going to make this regulation effective June 1, 2001. Basically, if this is adopted, we don't want to catch somebody in the middle of building, actually constructing and then having to go back and redo certain things. If that facility is going to be subject to our program, we'll come to them once they're operational. We actually work with people in advance now. But we'll come to them once they're operational and insure that they've got things in place.

The only other thing I wanted to mention and this is not going in the reg. now, but I did get one other late comment and I think it's a very valid concern and that's one related to say an emergency situation, an emergency regulation where something for some reason would have to be installed in a rapid manner that some of the regulated community would like to see some provisions put in for that. I did not want to just propose an amendment here. I think that needs to be thought out a little bit and needs to be put out to the regulated community to review and comment on. I just wanted to mention that I believe that is something valid to consider and when we come back for permanent adoption before November this year we will likely have something like that in that.

That covers the permit to construct regulation. I was going to get into explosives manufacturing now. For explosives manufacturing, I've already mentioned that these companies are essentially going to have to do what we already do under CAPP. First of all, applicability - it's specifically related to facilities that manufacture explosives for sale. There are a lot of operations that manufacture the ANFO on site. They don't get covered under this. If you're manufacturing materials though and selling them, then this does apply. ANFO was included in this. This was specifically one of the recommendations of the Clark Commission and it carried forward into the statute. So, technically I guess ANFO is not defined as a high explosive anyway, but it is part of our operation, as are fireworks as I mentioned before. We anticipate right now adding two facilities that are already in place. That's TRW up north here and Austin Powder down south. Those are the only two we know of right now.

Something about explosives regulation covers the use of a consultant. One of the things I expressed even during the legislative phase was that if we're going to get in and actually regulate explosives manufacturing we need the expertise. We do not have that in-house. We have three chemical plant mining-type people that have a lot of experience with the actual design and operation of chemical processes. I took great pains to make sure that I was able to hire those types of people. It's important to me to have people that are able to make some valid evaluation of a process and make a genuine contribution to the safe operation of these facilities. I would like to do the same thing in the explosives arena. It's really unique to chemical manufacturing now and nobody in our shop can really handle that. There is expertise that's required. There are a minimal number of facilities. It's really hard to justify hiring an explosives expert for two plants. So, we have opted to go the route of contracting for that inspection.

Another major issue and the other reason we want the expertise is simply for inspector safety. We may not, as inspectors, be concerned going out to some of these plants like a TRW who may feel very comfortable there, that we're not going to be put in harms way. But one of the main reasons we're pulled into this in working with explosives is because of other facilities that do not have a good operating history of a safe record. There may be unsafe conditions. My staff and I would not be able to recognize those types of situations and I do not want us going into a situation like that not being able to recognize that we were in danger. So, that's another reason behind adopting separate fee regulations for explosives just because we had to incorporate the use of a consultant and that's what you see in Section 27.

Program requirements - they are essentially the same as our existing Chemical Accident Prevention Program. I talked

about the prevention program procedures and training, maintenance, and emergency response. Those are the same requirements that are going to be put forward on the explosives manufacturers. A lot of the amendments are to insert the word “explosives” or “explosives manufacturing operation” along with the rest of the regulatory language. So you’ve got a whole long section, existing regulatory section with just a single word change.

The substance list amendment - in your regulation they’re the landscape-size tables. What we’re doing is just making it consistent with the statutory amendments. I also put some language in there to preclude us from having to do this in the future. In that I’m saying the substance is designated as having Tier A threshold quantity without limitation includes substances and quantities that are listed in the statutory reference 3816M the substances listed in this table. It makes it all inclusive. So if something gets pulled into the statute, it’s also incorporated into the reg. and all of the requirements apply. The statutory amendments dropped a few threshold quantities, added a few substances, very little, and we saw no increase in regulated facilities on that when it happened in ‘99.

Programmatic amendments - on page 18 of the regulation there is one which is the definition of “accidental release.” It is not a change in the definition, but it is a clarification. A release is a discharge from a process of any amount of Tier A or B substance into the air, land, water, including unintentional discharges within a building. There was some question about, “What does a release to the air mean? Does that mean ambient air or inside a building?” So we were clarifying that. Our regulation covers protection of employees, workers, the public and the environment and that is consistent with the legislative intent. The second one on that page is right below it now is the catastrophic release. Basically, if you had an uncontrolled emission, fire, or explosion involving one or more substances or explosives that present eminent and substantial endangerment to employee health, public health and the environment, basically that definition goes into a later requirement to investigate incidents. If an employee’s health is endangered by an incident, it needs to be investigated. That was, quite frankly, an oversight the first time around.

On page 39 there’s some simplification to the timing for our registration. We have an annual registration. As the programs mature we can simplify some of that language. Section 40, page 41, “Initial Registration Quantities” was never quite clear on exactly what you had to register initially. Registration quantity is always based on the prior year’s inventory. Well, if you didn’t have a prior year, what did you write down? So we put that in there. Section 42, page 42, clarifies the report of release of any CAPP substance. There was some question about that and that’s reporting in the registration of any accidents that you had during the year or any accidental releases. Section 51 clarifies the initial process hazard analysis has to reflect the current process. So it has to reflect what’s out in the plant. Section 53, page 57, the training records, also when we go out and evaluate training records and employee training files they also have to have the test records in place. Section 62 just clarifies some ELP coordination requirements to ensure that even facilities that are not providing response to emergency response situations still need to do coordination activity with the fire departments. They’ll just call 911 and evacuate. You have to call the fire department in and make sure that they know what you’ve got there and that they can handle the situation. The fire department has to know what they’re getting into.

Section 65, page 67, again, technical clarifying some assessment report submission requirements. That’s just the summary of the Chemical Accident Prevention Program activities and their compliance with all of our program requirements. Similarly, Section 71 has to do with when that report has to be updated, clarifications. Section 72 “Assessment Team Submission Requirements” we basically approve a team of individuals that conducts these hazard investigations of the plant and evaluates them for safe operation. We require that they have a well-rounded team, somebody with background in operations, maintenance, engineering design. There’s some clarification to the assessment team submission requirements there. Lastly, we adopt another code by reference that’s due in part to the

permit to construct regulation.

Commissioner Ricci stated Mr. Zusy I'm going to confess that I didn't read every single bit of the regulation. I read most of the stuff that you added. In Section 4 where you talk about the first responding fire station and you've kind of elaborated a little bit about the local fire department gets involved in this kind of review. What happens if the fire department says that they can't handle this?

Mr. Zusy explained that's where the permit to construct comes into play. One of the criteria for accepting or for approving the permit to construct is that there has to be someone that can handle the hazardous materials response. Commissioner Ricci asked could they possibly provide their response?

Mr. Zusy answered yes. Many facilities, the larger plants, say for example down in Henderson, all have hazardous materials response capability on site. But they still coordinate with the local responders and the local responders know what's going on in those plants and they, essentially, provide backup. But they can get in and of course help with rescue and various other activities. But the bottom line is somebody's got to be able to provide that.

Commissioner Ricci asked and if they can't then they don't build it?

Mr. Zusy answered yes. That's the way that this is written.

Commissioner Ricci asked is there any thought given to any security measures for these particular plants or is that up to the particular plant operator themselves?

Mr. Zusy answered there's nothing built into our regs. directly. One of the issues that we look at under the process hazard analysis element of our program is that they evaluate site security. There are numerous things we also ask them to at things like human factors, off-site impacts, other plants having problems and in that list is included site security. We do not have mandates for that, however. But, presumably, if a facility identifies a concern there we would expect that they take some appropriate action.

Commissioner Ricci stated on page 4 under Section 14 when you talk about these documents, drawings and calculations being submitted pursuant to these regulations, you stand by an engineer. Is that any type of registered engineer or is there a registration specifically addressing these particular types of facilities?

Mr. Zusy explained it has to be an engineer that's licensed to stamp that type of drawing or calculation and that's addressed in the engineering NRS and NAC. The PE board has their own separate sections, 625.

Commissioner Ricci asked there's an actual registration category for dealing with these kinds of plants?

Mr. Zusy answered yes. For example if there's a foundation drawing, a civil engineer or licensed civil engineer, possibly a structural engineer . . .

Commissioner Ricci stated I'm thinking more from the standpoint of the processing as opposed to the structural or anything like that. Is there anything dealing with these chemical accidents or anything like that? Is there an engineer that does any of those kinds of things?

Mr. Zusy answered there are fire protection engineers. Some of the things may be stamped by other disciplines like chemical engineers or mechanical engineers.

Commissioner Dahl stated just to follow up on that, if the engineer stamps the plan then I see it requires that the company supply and inspector. Does that need to be inspected by a separate inspector if it's stamped by the engineer? Say the plans for concrete foundation for a tank?

Mr. Zusy answered the inspection comes after. The inspection is the field installation. The engineer does the design and the drawings, how to build it. The inspector makes sure that it's done per the drawings.

Commissioner Dahl asked if the engineer or the engineering firm which often happens supplies the inspector, is that sufficient for you?

Mr. Zusy answered that's quite often for engineering and construction firms and they have those types of individuals on staff to do that.

Commissioner Dahl asked could you give me an example of facilities that would be subject to this program? Small ones?

Mr. Zusy answered there are some small ones. We have, for example, a couple of bleach manufacturing companies in the State. They'll take chlorine out of 90 ton railcars, pipe it into a skid, mix it with caustic and make bleach. It's anywhere from household bleach to disinfectant and water treating.

Commissioner Dahl asked how about say a small water system for 150 houses that uses chlorine in their water? Would they be subject to these regulations?

Mr. Zusy answered they would have to have more than 1,500 lbs. of chlorine on site. We have worked chlorine very hard in this State and there are no small treatment facilities that have that kind of chlorine on site. And, as a matter of fact, we've gone further and encouraged them to switch to sodium hydrochloride to bleach.

Commissioner Johnson asked there is an agriculture exemption for anhydrous ammonia, is that correct?

Mr. Zusy answered yes.

Vice Chairman Coyner confirmed with Mr. Zusy that was the end of the staff's presentation. He then called upon Tony Clark.

Tony Clark introduced himself as formerly the Adjutant General of Nevada and currently the Solicitor General. He stated I served as Chairman of the Governor's Commission on Workplace Safety and Community Protection which was established in January of 1998 following the explosion of the Sierra Chemical facility just east of Sparks. The Commission was charged with thoroughly reviewing the explosives manufacturing industry and developing recommendations to improve the safety of the industry. Over the course of several public hearings and extensive testimony we learned of the deep tragedy of this explosion that claimed four lives and severely injured six other additional workers. What's more we learned that this accident might have been prevented if the proper regulatory safeguards had been in place and had been enforced. Ultimately, the Commission developed 29 recommendations and a final report. Several of these recommendations resulted in legislation being passed in the 1999 session of the Nevada legislature and a number of others, I think seven, were immediately enacted or adopted by the Governor as executive orders. Two of the recommendations are the subject of the proposed regulation before you today. This

includes the addition of explosives manufacturing to the State CAPP program and a requirement for new CAPP regulated facilities to obtain a permit to construct prior to commencing operation. These are vitally important measures to safeguard workers and the public from a catastrophe like that which occurred at Sierra Chemical and I urge your support for their adoption.

Vice Chairman Coyner called for questions. There were none. He called upon Jurgen Poblitzki.

Jurgen Poblitzki introduced himself as representing Advanced Specialty Gases. He stated Advanced Specialty Gases is a small chemical manufacturer outside of Carson in Dayton. We fall under the CAPP program. Before I start my presentation there's one thing that I wanted to add to Mr. Ricci's question on the security on a facility. I don't know anything about explosives, but for chemicals, especially highly hazardous chemicals, the security measures are written in the Universal Fire Code. So whatever actually needs to be done, it is written in the Universal Fire Code.

We believe that this petition in some instances is unclear and subject to different interpretations creating a confrontational atmosphere only to be solved by District Court. We also think that this petition seeks jurisdiction for any fee outside its stated mission, for instance, the local building departments or for (inaudible) health which is regulated by the Nevada Department of Industrial Relations, especially the OSHA section, which stands for Occupational Safety and Health. The local building inspections, if the local building inspectors are not capable of judging, then they have the possibility, and they have done it on our case, to send all the material to an institution called International Conference of Building Officials. We have to supply the material. We have to pay the bill for this. This is available to every local building inspector or building department around.

We are convinced that the implementation of this petition will have a far reaching negative impact on the chemical industry to a degree which has not been evaluated yet. As it pertains to Advanced Specialty Gases, it probably would mean that we have to think about closing our business in Dayton. The reason I'm saying that is because in one of the sections, I believe it's Section 43, a change was made to talk about a release of a substance. At this point a substance is anything that is in that list. It pertains to hydrogen. It pertains to propane. It pertains to acetylene. It pertains to natural gas. This is a substance because it's (inaudible). So, since hydrogen, for one thing, is a byproduct of all process that means we cannot release it anymore. It means if you want to weld, you need acetylene. You cannot detach the regulator from an acetylene bottle because you're going to release acetylene which is a substance according to the regulation. The same thing happens for natural gas or propane. It came from a disconnected propane cylinder or a propane regulator from a propane cylinder because now we become subject to the regulation and you have to go through a lot of paperwork. On top of this, there wasn't a release as it is mentioned in the section is still open to interpretation since the Nevada Department of Environmental Protection does not accept the federal U.S. EPA definition of a release and on the other end it fails to provide its own.

In addition, numerous stipulations are unfeasible to comply with and unwarranted. I don't want to go over all of them because it would take a lot of time. I want to mention a few that are unclear. For instance, in the petition on page 72, line 12 we talk about the program tiers and program level to which the process is subject. That means eight single processes can be subject to two because two different tiers? Is that the question? Because this is the question we have asked the NDEP. We haven't really gotten the answer. As a matter of fact, we got the answer "no, as soon as you have eight substance in the process, if it is a Tier A substance the whole process is a Tier A process." However, this regulation tells me there are program tiers available for one single process. This is unclear. The other issue that is unclear is the emergency response plan, which is on page 4, line 7. It says you have to have an emergency response plan before you can start construction. It is so that the regulation itself, I believe it's NAC 459.9544 tells you that you have the option. You can have either an emergency response plan or you have an

emergency action plan. So the regulation gives you the option; however, this petition says you've got to have an emergency response plan. That doesn't make much sense at this moment.

We talked about the outside jurisdiction that the NDEP wants to know five days ahead when concrete foundations will be poured. Up to this point it's still the local planning department, or the local building department's responsibility and it hasn't changed. We are worried that for pouring of concrete structures for a tank, for instance, that the NDEP would be involved. The Universal Building Code is pretty clear that any process related to concrete foundation has to be approved by the local building department. So, from that standpoint I don't see the need for the NDEP to get involved.

Let me talk about some unfeasible items that we have and that's on page 3, lines 26 and 27. It says, "The mode of transport for incoming and outgoing raw materials and products and transport roads has to be submitted prior to construction." I can see the raw material that's coming in that they might be determined. However, it is very hard, especially for a small company. If you start (inaudible) you can start to construct to know whom you're going to sell to at the end and to know how your product is going to be shipped to them other than by truck. Because that's basically the main (inaudible). Or, I mean mode of transport. However, and I can say from our point of view we don't have to a certain point no thing and how or what transport routes the material goes because we sell to the semiconductor industry and they stipulate what trucking company we use and there's nothing that we can say. We sell a lot of material outside of the U.S., to China for instance, to Japan. And I cannot see how the NDEP has to get involved in determining the route of the material in China.

Another unfeasible issue is on page 7, line 16 and it says, "The manufacturer model number and quantities for items identified under subparagraph 1 through 5 has to be presented." If I remember correctly, subparagraph 5 talks about personal protective equipment. Personal protective equipment is anything, it is (inaudible) gloves, it is hard hat, it is safety goggles, it's safety glasses, (inaudible). I do not understand why these have to be presented before you even start to construct. You don't even know, even if your construction takes two years, where you're going to buy them later. I don't understand why the NDEP has to get involved at this point in time.

And on an unwarranted charge I want you to look at page 11, line 8 where again we talk about the emergency response plan. In the regulation the definitions kind of vary a little bit or are intermingled because it is my understanding that you have to have an emergency response program. In the emergency response program you have the option to either have an emergency action plan, which is okay with OSHA because they say the same thing, or if the owner or operator of the facilities decides to engage in the emergency response then you have to have an emergency response plan. I agree. The thing is if the owner or operator decides to have an emergency action plan then emergency response has to be provided by outside help, meaning the local fire department or the hazardous material responder. However, at this point the statutes still leave you the option to have either an action plan or a response plan. I would like to close with this. Mr. Chairman and members of the Committee we at Advanced Specialty Gases ask you to stop this petition in its current form. We think it is only fair in the interest of industry to call for more time and to prepare for a fruitful dialogue.

Commissioner Iverson stated I would assume there have been workshops and people have an opportunity to come in and express their concerns from small manufacturers to large manufacturers prior to these regulations coming to this Environmental Commission. Have there been hearings on this also?

Mr. Zusy answered yes. We've held workshops. We've announced those. We've had the reg. available. We've put

notices out by mail that it's available. We've made it accessible through our Website. So we've noticed it several ways and provided opportunity for people to participate in workshops and provide comments as well as submit written comments.

Commissioner Iverson stated okay, this is the public hearing phase. Have you had other hearings or just workshops?

Mr. Zusy answered they were three workshops in the different places in the State.

Commissioner Iverson asked where were those workshops?

Mr. Zusy answered they were in Battle Mountain, Carson City and Las Vegas. Those are kind of the hubs where most of our plants are so we always hold workshops in all three.

Commissioner Iverson stated all of the concerns that you voiced seem to be concerns that probably could have been worked out either on a one-to-one with DEP, the gentleman that wrote the regulations or a workshop situation. Historically, when DEP passes a regulation they do look at small manufacturers, medium-size manufacturers and large manufacturers and try to structure the regulation so that we don't put a business like yours in a position where the business may have to close down. I think they've been really receptive to working with companies and I understand where you're coming from on all these things. Did your company or did you, representing your company, have an opportunity or did you participate or did you make a proposal to these gentlemen to make these changes prior to today?

Mr. Poblitzki answered no, we did not attend the workshop that was held in Carson City. One of the reasons for that was actually at that point in time we were in an alleged violation process with the NDEP and still are today. So the atmosphere wasn't really in a way that it would have helped at that point in time. That was one of the reasons why we did not attend that workshop.

Commissioner Dahl stated when you talked about the regulation preventing releases acetylene and propane that you can't disconnect the connections. I didn't understand that.

Mr. Poblitzki stated I don't think that the petition is a bad thing. I think it's good. I think that it just needs to be worked on on certain things because that you have to maybe put some numbers to releases for that effect. The way it's written at this point is, first of all a release as such is not defined by the NDEP. We have accidental releases and we have catastrophic releases. The word "release" as such is not defined. So we have different viewpoints on that because we go with the U.S. EPA so your release is something that goes off in the building. NDEP says the release is something even into the building and it should read that accidental release amendment for instance where, again, a release is not defined. Now, then the change was to any substance. A substance at that point is a substance which is part of that table. So we've got release not being defined, meaning you can do this inside the building according to NDEP's view. It means any substance. Propane is on that list. Acetylene is on that list. So, if you have a propane cylinder of so many PSIG you have the regulator on you and you want to get that off, you usually hear this and the gas is gone. According to the definition as it is at this point, this is a release and we have to go fill out all of the paperwork that actually belongs to that.

Commissioner Dahl asked Mr. Zusy is this the way you see it?

Mr. Zusy answered no. Basically we have requirements for accidental releases that's an unintentional discharge from a process of any amount of Tier A or Tier B substances. Basically it's an unintentional release.

Commissioner Dahl asked so if you intended to . . .

Mr. Zusy answered well, yeah when you break a connection that's going to happen, you have fugitive emissions, say, from valve packings and the like. There are things that happen during the normal course of operation. But things like that, it doesn't apply. The other point is that, for example, in a settling welding torch you have a settling and an oxygen hooked up to a torch, that's not part of a regulated process under CAPP. So anything that's in here really doesn't apply to that anyway. But it's unintentional.

Mr. Poblitzki stated that's not the way I understand the regulation. If I may read this it says, "Any (inaudible) or unusual event in the facility that resulted in an accidental release or the release of any substance." The release of any substance and that's where the problem comes in because a substance is just like that, anything that is in that list. If that hasn't been amended in the past, it was just a Tier A or Tier B substance. Now it's any substance and no matter what quantity it is.

Commissioner Dahl stated you made the statement that you may not be able to continue in business because of this. Is there one specific thing that would . . .

Mr. Poblitzki stated one of our by-products is hydrogen, so that means that we have to release this hydrogen and this is because it is uneconomical to save it.

Commissioner Dahl asked is there some way that could be worked out?

Mr. Zusy stated there is no prohibition on releasing the nitrogen from a process. It's the unintentional discharge. It's the accidental release. They release the hydrogen. Now on the air quality side there may be things related to continuous emissions that need to be addressed. But in terms of this program it's the accidents that we're giving the attention to, the unintentional events.

Commissioner Dahl asked do we need to change wording to make that clear do you think?

Mr. Zusy answered I thought that was fine.

Vice Chairman Coyner stated it would be page 43 line 2 and 3 in Section 42.

Mr. Zusy stated well, no because basically it's saying any unanticipated or unusual event at the facility. Breaking a connection on a propane regulator, having fugitive emissions from valves or packing, or having continuous discharges from stacks, rubber stacks for example, those are part of the normal operations. Those are not unanticipated or unusual. So I think that language is fine. We're interested in things that are unusual, unanticipated accidents, what I'm sure were noticed of those things because we want to ensure that the plants follow up and take corrective measures as necessary to prevent recurrence.

Vice Chairman Coyner called for further questions. There were none. He called upon Rick Stater.

Rick Stater introduced himself as being with Kerr McGee Corporation in Henderson, Nevada. He stated what I have is a letter I'd like to read into the file that relates to the most recent revision that Mark has made to the provisions.

"We greatly appreciate the opportunity given to Kerr McGee to provide comments on the proposed regulation amendments related to Assembly Bill 173, 535 and 536. The communications we have had with Mr. Jones, Newell and Mr. Zusy have been great fully beneficial to us in understanding the purpose behind the amendments. We look forward to working with Mark to further define and further clarify the remaining points of disagreement. In our original submission we had numerous items that we felt needed review and most of those have been reviewed. There's a couple left that we want to discuss, however. Two areas that remain that need further discussion and refinement, redundancy, the designs have been wet stamped by the appropriate engineering discipline with valid Nevada professional engineering certificates should not be required to be reviewed again by another professional engineering firm. The documents are required to be wet stamped by Nevada professional engineers indicating that the drawings and specifications meet good engineering practices and applicable codes. We understand that the review of some elements of the engineering package may be necessary by the NDEP. The present amendment does not provide clarity as to what items reviewed by local building departments are considered acceptable. Mark has made some comments in there that aids in this, but there still is some vagueness in exactly which items would be required to be submitted to the State prior to getting the permit. The other element is timeliness. The existing permit proposal is very lengthy and does not have provisions for a temporary or interim permit in those instances where the proposed operation is to serve the public good. Environmental and public safety related requests may not be well served by the undue delay or uncertainty in the permit process. Some proposed construction projects may be at the first-of-it's-kind technology and not fit the structure that allows for the complete firm design in advance. Changes in the design will occur as the construction progresses."

These items I think have been recently mentioned by the previous gentlemen and other folks. We feel that to submit this material in advance, we have recently done a project that was of that nature, we don't have the full design done two to three to five months in advance. We have worked with the State EPA to resolve things that develop as the process was deemed relevant so that the drawings could not have been submitted up front as proposed in this. And we think if there was a provision in the proposal that would allow for an interim or a temporary permit system to be in place it would assist in those applications.

Vice Chairman Coyner called for questions. There were none. He called upon Dean Haymore.

Dean Haymore introduced himself as the Storey County building official and planning administrator for Storey County. He stated I'm here to make some comments on a couple of things and I've been with Storey County for 14 years and have gone through a learning curve with NDEPA. I'm not going to make a lot of comments because they're redundant. The local building officials do have a part in the building code that allows us to have technical assistance on these kind of processes and make the companies pay for that technical assistance all the way back to the process, to the buildings and everything else. One of the other things under the building code, I'm the one that has to send that (inaudible). I'm the one that has to allow that really to be operated for the intended use of that building. The reason why I'm here is TRW which is one of the biggest companies. I also am the planning administrator.

We have completely re-changed our zoning to accommodate problems that we've foreseen with these kinds of companies and made regulations that they had to be a minimum of two miles away from any subdivision, one mile from any residence. The same scenario happens, we build an airport and everybody moves around about and complains. That's what's happening with these kinds of companies. I appreciate NDEPA. I worked side-by-side with NDEPA and we have come up with a lot of these recommendations because there were problems out there that were not addressed in the building code. Building departments didn't catch them. But there's a lot of redundancy beginning with the foundation. Right before you get to the foundation you have soils analysis to make sure that the foundations, you have buildings that are built to explode. They are built to take pressures. I have a building out there and the way the county looks at this is I have a building that's 15 feet by 15 feet that's \$1.8 million. That's a lot of tax revenue to a small county. Yes we do a lot of checking, a lot of testing. We have a blast wall that's built to blast and take that building when it does, if it does. The technical reports show it will explode at some point.

We have bunkers, control bunkers and safety procedures. The gentlemen said, "Yes. Storey County requires 24 hours security, complete reporting to the sheriff at NDF, NDEPA." We have hazmat that when a building permit, before it is issued, we have to have every commodity, every product, every material, every chemical turned over to the HAZMAT so they can see that they're compatible. We have standards and requirements when we have an explosion we don't respond we respond to an area, wait 30 minutes from the last smoke to fall before we go in and look at that area. These are highly explosive, highly dangerous buildings. But, I'm glad to see that they changed some of the permit requirements for the fees. That's what I'm mainly concerned about is the permit time, the review time. Special use permits are required by the county which that locates. A lot of those are addressed.

When the county, through their hearing process, makes a determination that they will let this kind of operation in their county I'm really scared that if we open that up through NDEP for public comment and a hearing to have comments for everybody to be able to make on that building. We don't require that if you build your house. It's a big difference I understand. But if the county has made a decision that they are willing to let this company come in, I think as the review process currently goes through on every building, that's going to lengthen the permit time. That's going to lengthen the process. I believe that we can work with NDEPA on that short net. I think a lot of it's redundancy, the special inspections, the concrete testing, the structural. Those are things we require. Those are inspectors that have to be certified like I am to be able to accomplish those inspections. But those are things that can be duplicated and handed off to NDEPA. It's a world market.

I deal with TRW every day. I was up there this morning going through a building that's retrofitted, \$1.8 million just to retrofit to put a press in. The press costs \$900,000. That's personal property tax to Storey County. A lot of these technologies change rapidly because the need is out there. They don't even know what they're going to make in six months to a year because they're out there inventing that. And the process is invented with that. Now, it's very important that we make sure there are safety procedures in there. The bonding, the grounding, the handling of this equipment, the handling of these chemicals is very important.

I support what NDEPA is doing. We can work together to make it so it's not harmful to these companies and won't put them out of business. TRW is bidding on one right now with Germany and trying to come (inaudible). We've just done \$28 million in retrofitting over the last two years with TRW. That's \$28 million of taxation into Storey County.

If it puts a burden on these companies and they can't do the work in the State of Nevada, that's revenue that we've lost. My name is on the bottom line authorizing use of that building. I work closely with all of the other agencies. I do not want to see a death with these. Deaths do occur. But I want the buildings to work right. There are procedures to be set for everything to be done. Let's do it and move along because the technology is going to keep on coming

and we demand different products to be delivered.

Commissioner Iverson stated I appreciate your concerns. I still don't understand what you're asking us to do. Are you asking us to delay this until you have the time to sit down and work with DEP? Are you indicating that you've worked with DEP and that you can work through these things?

Mr. Haymore answered DEPA had a workshop that I attended. I did not get to have any input. They did make some changes that I'd like to see, the cost, for example. The building permit for a million-dollar project is \$3,499. The plan check for that is 65 percent of that building permit. What I am seeing here is if it's a \$5,000 permit for them to just do a process, some of these processes are very small, but the chemicals that they use are very dangerous and the process can be from grinding it, to taking it down, to mixing it with other compatibles. That could be a cost. I like where the NDEPA said what the actual cost is. I don't like the \$5,000 up front every time somebody comes to get a permit and I tell them it's going to cost them \$5,000 and then I charge them. They're not going to come to my department very often. I think that needs to be looked at. I think we can work with the companies. I think NDEPA is hitting new ground that they don't see yet. And it is scary when you hit that new ground.

Commissioner Iverson asked are you asking them for a period of time before this Commission adopts these regulations where you can sit down with DEP and work out the few issues that you still have in that?

Mr. Haymore answered yes. I sat through the workshop. I think there was 8 or 15 companies in Henderson and up here. I don't think the companies had a lot of input or were scared to make input. I know I sat there and there was only two building departments I know that were there. It does concern water and sewer, generating plants, because they all use these chemicals now. I'm sorry at this late notice to come into NDEP and I apologize to them. But I think it's only fair to look at it to make sure we're not impacting those companies that have expended millions of dollars to come to the State of Nevada and we want them to expend millions and millions and hundreds of millions of dollars more.

Commissioner Iverson stated there's been a tremendous amount of work done on this by DEP to get to this point. But, on the other hand, I think many of us are concerned about the businesses out there and also the counties and your responsibility. So, I just wanted to ask whether you felt like we needed some time and whether you felt like you had enough input during the workshops. Dean, I really respect you. You are a one-man operation in Storey County. You do it all. You even fill in old holes that drop out from in front of the school building. I know you have a lot of responsibility. Your input means a lot to me. On a lighter side, you indicated that TRW was building a building up there that was ready to explode. You realize we're responsible for all of those stray horses. There's about 200 of them sitting around that building.

Mr. Haymore stated TRW waters them too.

Commissioner Iverson stated so if the building is going to explode, I think they may want to adopt those horses out before it does.

Mr. Haymore stated we fenced those buildings.

Commissioner Iverson stated okay.

Mr. Haymore stated and things like that, and I appreciate that.

Vice Chairman Coyner called for further questions. There were none. He called upon Craig Wilkinson. Craig Wilkinson introduced himself as the health, safety, and environmental manager at Timet in Henderson, Nevada. He stated I want to thank you for providing me an opportunity to speak to the Commission on these proposed changes. First I'd like to go on record with the fact that Timet supports the Nevada CAPP program and applauds Mark Zusy and his staff's primary objectives of protecting employees, the public, and the environment. However, I have a couple of concerns with the proposed change as they are written. The first being the time restraints I receive in the permit to construct. With the dynamic global conditions that we operate in today, rapid deployment of new processes is critical and a delay in a permitting process can have devastating consequences in a business today. With some language change, with an interim or a temporary permit program, I think that hurdle can be accomplished.

The second concern addressed by other members is the redundancy in engineering review. If we're going to bring a new process into our operation, we will hire an engineering consulting firm with licensed PE's, professional engineers, to design the process with current codes and standards and good engineering practices. This is then reviewed by the consultant peer group of engineers which is then brought to our company where it is again reviewed by both process and project engineers and a portion of this again is reviewed by another engineer, a licensed P.E. from the State of Nevada during a hazard review. An additional engineering review after this is redundant. I do believe it is imperative that with a new process we get together with NDEP and the CAPP program and sit down with Mark and his group and say, "These are the codes we're building our program to. These are the standards we're developing our process to." But to have a detailed and comprehensive engineering review at that time I feel is redundant and not the best use for the staff. And, lastly, are the stringent requirements for the off-site consequence models as far as public receptors. These requirements may have economic impact to Nevada in respect to new businesses and may be short lived with the rapid growth around industry.

Commissioner Iverson asked I assume you attended the workshop in Las Vegas?

Mr. Wilkinson stated I did not have an opportunity.

Commissioner Iverson stated Timet is a big company down there. Were they represented at the workshop?

Mr. Wilkinson stated I am responsible for this program for the company and I did not have an opportunity to attend. Commissioner Iverson stated it sounds like there's two or three small issues that need to be resolved. It sounds like everyone supports the idea, the concept. But there are a few items in here that are of concern. These are temporary regs. too and I guess you have to understand that these regs. are all going to have to be approved again in November?

Mr. Cowperthwaite explained these will probably be processed back through the Commission probably in September. They expire by limitation on November 1st. So we probably have to get it in the pipe much earlier to make sure that there's continuous coverage of the regulations. They will be brought back to you under permanent status.

Commissioner Iverson stated they are temporary regulations and it's important we get something out there for safety purposes. But during that six-month period of time it does give you the opportunity to sit down with this group and come back with these regulations. They have to be brought back in front of this Commission for adoption as permanent regulations probably in September to meet the November 1st deadline.

Mr. Wilkinson stated I agree with your statement. The fact that any responsible corporation or company would

support these regulations to what degree and what depth is the discussion here, absolutely. We do not see any new

processes in the future, but most of those are not due nine months apart anyway. It would not have an impact on Timet if they were implemented today as is. But it may have impacts on other companies.

Vice Chairman Coyner called for further questions. There were none. He called upon Christopher Sylvia.

Christopher Sylvia introduced himself as representing Pioneer Americas. He stated we're a chemical manufacturer. We have a plant in Henderson and other sites in the U.S. and Canada including California and Washington. I'm primarily here to address the concerns about the authority to construct permitting process as proposed in the petition. Our recent experience as a company, particularly for our sites in California and Washington in the areas of energy and market conditions has caused our company to make rapid changes in how we operate process and also installations of new types of equipment. We feel that the authority to construct permitting process needs to have flexibility to allow industry to respond in a rapid manner through a very changing market economy in the U.S. that's also impacted as part of the world economy. So we need to be able to respond in a timely manner to those conditions.

We would like to propose a modification to the criteria for issuance of the ATC. In general, we support the initiatives that Mark and NDEP have done in the Chemical Accident Prevention and RMP. However, these proposed regulations with permitting are fairly unique in the United States for a State permitted authorization. I also believe we're the only ones in the U.S. to have a program like this at the present time being proposed. Some of the things that we're proposing are in terms of the emergency response requirements. We believe that the emergency response requirements should focus on the facility's ability to mitigate the hazardous substances within the facility. We think that including the outside fire department and other agencies in the issuance of an ATC will necessarily drag out and extend the ATC issuance.

As far as the public review process, we believe many of these installations which will require an ATC would also require other permitting under air and water regulations, possibly others. We would like to combine a public review process with some of these other agencies, particularly other bureaus within the NDEP. For instance, if a water permit or air permit is required could we include also the ATC for this program in that public review process? These things could be accomplished if we modified the ATC process so that a permit to construct could be issued and then, as part of that process, an ongoing review of all of the information that NDEP is proposing to be permitted is submitted up front, be reviewed during the construction, to allow construction to commence while these processes continue. It's normal during the course of an engineering or construction program that the design will go through several different iterations. Also during the course of that time hazard operations may have to be reviewed more than once, which would result in changes.

Finally, my last item is in the area of off-site consequence mitigation. I feel that is going to have a dramatic impact on industry in this State, particularly in the area of cost and also in property usage. We all know that there's been a lot of encroachment around certain industries, particularly in the Henderson area and the Clark County "donut hole" as it's commonly referred to. We'd like to see and review that more extensively with Mark. Commissioner Iverson pointed out that there has been a review process and workshops that have gone on with NDEP and several of the industries have not, or were unable to attend. Although we continue to have scads of communication with Mark, I believe what we're asking for is more time to work out just a couple of these issues that a few of us have brought forth.

Vice Chairman Coyner called for questions. There were none. He called for further public comment. There was none.

Dave Emme introduced himself as Mr. Zusy's supervisor with the NDEP. He stated I think you've kind of grasped

this, but it is a temporary reg. We will be coming back to adopt this as permanent. I would just suggest that if you do adopt this reg. today that we would commit to hold workshops in the interim before we come back to bring this as a permanent reg., make any revisions that may be appropriate in that process.

Vice Chairman Coyner called for questions. There were none. He declared the public comment portion of the hearing closed. He called upon Mr. Zusy to address the comments.

Mr. Zusy stated first of all, I alluded to the issue of a temporary or an emergency permit. That is something, quite frankly, I never really considered. It did not come off in any of the written comments or comments during the workshops. I think that merits further consideration, and, like I said before, I think we do need to discuss that in detail.

The issues about coordination with local building departments - I will note that we've been talking to people and I met Dean before. We've also worked together through the Nevada Organization of Building Officials. So we've been talking about this for a while.

The issues of redundancy need to be addressed and I believe that we have the language in the reg. to already address that. The biggest overlap is really in the structural civil, the building-type things and we would just as soon have building departments handle those types of things. We are really focused more on the process itself and the pipe and controls and the operation. In working in detail with the Washoe and Clark County Building Departments we have received confirmation that basically the things we are looking at are issues that they do not get into, the mechanical design of the process. That is different even than the Uniform Fire Code gets into. The Uniform Fire Code does address certain life safety issues. It may address vessel separation and certain layout items, but when it comes down to the process and the mechanical design, the pipes, pumps, compressors release, that really does not get addressed anywhere in building or fire codes. One of the things that I talked about earlier was the questionnaire I sent out to the building departments and that was confirmed by several additional building departments in addition to Washoe and Clark. I just wanted to point that out. I think we do need to talk in more detail about coordination with the counties. I do not believe that the engineering review is redundant or it's minimal. We can work to take care of that situation.

There was one earlier comment about using the ICBO the International Conference of Building Officials. That was done for a plant and basically they reviewed fire codes and building codes. That's what they do. It does not get into the mechanical design process. So that doesn't replace what we're doing either.

Commissioner Iverson addressed Mr. Biaggi. He stated I think all of us realize how important this is to get adopted. It's something that the State's worked very hard on. The Governor had a committee working on this. It's something that we absolutely need for the protection of our citizens. We talked about the encroachment on some of these plants, we've seen it, and it's a real issue that needs to be addressed. I guess I'm asking you two things: What would be the impact and what would be your feelings, because your feelings are very important to this Commission, concerning a postponement of the adoption of these temporary regs. for three months allowing the industry to come in one more time to work out some of these issues. Is there going to be an impact? Is it a major impact? Is it something that we really don't want to delay? And then the other thing is should we just go ahead and adopt these with the understanding from your staff that over the next several months they will work with these companies and will come up with some amendments that we can be presented in September so that we can move forward? I think we need some direction from you on what you want us to do.

Mr. Biaggi stated I don't think there's anyone that is proposing processes at this time within the next few months that

this is going to impact if we move forward with it. I will give you my personal commitment and the commitment of the Division of Environmental Protection that we will hold additional workshops and provide additional opportunities for input in order for us to come back to you at the soonest possible opportunity with permanent regulations to address the concerns that you've heard expressed today or any other concerns that may come up in the future.

Comm. Crawforth addressed Mr. Zusy. He stated I have this question on several areas in the regulation and I understand that this is a commercial operation, but I would ask that you consider and ask for your input on firearms and ammunition. There's a lot of people that have various operations to do with that and when we talk about it includes explosive storage sites which are incidental to manufacturing. I guess the question is how incidental? Is it right on site, or is it after I sell a few hundred pounds of black powder to somebody and then they mix it and make something else maybe even commercially or noncommercially or both? What are the impacts to those kind of activities?

Mr. Zusy answered the first answer is that it was intended to be a storage on site incidental to manufacturing. The manufacturer put it in a bunker. The second point is that in the definition for explosives I'll just point out that term "explosives" does not include any ammunition, powder, percussion caps, fuses, quills, matches, primers or explosive materials. So, gunpowder and the like are not covered.

Commissioner Johnson stated Section 42 in this accidental release or release of any substance, it's my read that there's really no conflict between what you intend and what's actually happening, but the language that's here is confusing to me at least and I'm not at all sure the reason for the last part of that in Section 2(a) ". . . or the release of any other substance as compared with of any quantity of Tier A and B." (Inaudible)

Mr. Zusy explained first of all, this definition is used in defining when certain types of incidents have to be reported on an annual registration. So it says you're reporting accidental releases. The issue here is what types of releases do you have to report. Well, first of all, you're only reporting on processes that are regulated under our program. The process is vessels and equipment that are interconnected by pipe. It could be a big, long thing and it has in excess of threshold quantity of a substance. That substance is a Tier A or a Tier B substance by definition if it's in excess of the threshold quantity. Now, in addition to that there may be other substances that are on our list. All the things on our list are very hazardous, but there may not be enough of that material to satisfy the definition for a Tier A. They may not have enough in there. But it's still part of the process we regulate. The whole process is subject to our program and if something gets released of that material even though we don't have it in quantities above the threshold, we still want to be informed of that. That indicates there's a problem with this regulated process and we want to be able to follow-up and see that the appropriate investigation took place.

Commissioner Johnson stated but this is a matter of construction, but you're really talking about any unanticipated or unusual event that results in the release of any substance that's on your list?

Mr. Zusy answered yes.

Commissioner Johnson asked not just any substance and it's particularly just accidental or unusual event, not the purposeful release?

Mr. Zusy answered correct. You're at a slight disadvantage here because we don't have the whole reg. Actually "substance" is defined in the permanent reg. and it is defined as "any material on the list."

Commissioner Johnson stated right, this was the confusion that at least I heard regarding this - that what you were intending to be reported wasn't clear. That's what I want to see clarified.

Mr. Zusy asked is there something that needs to be reworded then, or is that clear to you now?

Commissioner Johnson answered from my standpoint I think by your stating that on the record will do that.

Vice Chairman Coyner asked if there was any objection to the admission of Exhibit Nos. 6, 7, and 8 into the record. The exhibits were admitted. He called for further discussion. There was none. He called for a motion.

Commissioner Iverson stated after hearing Allen's comments, and I think the industry understands that this agency does want to work with them, I would make a motion that we approve the temporary regulations for Petition 2001-06 with the two changes that were discussed.

Comm. Crawford seconded the motion.

The motion carried unanimously. Chairman Close abstained from the vote.

Mr. Biaggi requested that the Commission take the Granite Construction Company agenda item next since it could be heard quickly.

Chairman Close moved to **Item No. V. Granite Construction Company Environmental Compliance and Permitting Manager.**

Mr. Biaggi stated as you'll recall two meetings ago in this room we had a lively discussion concerning the compliance status of Granite Construction and others. At that time Granite Construction made strong commitments to the environment and a commitment to hiring an environmental manager for their operations in Nevada. I'd like to introduce a couple of people from Granite who would like to demonstrate to you that they have fulfilled those commitments and introduce the environmental manager to you today.

Paul Gianoli introduced himself as being with Granite Construction Company. He stated I'm the manager of all of our asphalt, aggregates, and ready mix concrete production in the State of Nevada. As you may remember, in the fall of last year I was before this group in reference to a dust violation that we had in the Carson City area. At that time I committed that we would, in fact, hire an individual who would deal with environmental compliance and permitting issues for the company. At this time we have hired an individual, Mr. Tom Walbom, who I'll introduce to you today and he has been hired and has been actively working since November of last year. Tom has been becoming acquainted with all the regulatory agencies and is becoming with all of the requirements and he has brought a lot of things to our attention and we're getting ahead of the curve. So at this time I would like to introduce Tom.

Tom Walbom introduced himself as the manager of environmental compliance and permitting for Granite Construction for all Nevada branch operations. He stated shortly after being hired, I sent each one of you a letter briefly discussing my background, my personal history with my career. For those of you who are not familiar with

that letter, for the past 13 years my professional career has been in the arena of environmental consulting within the State of Utah. During that time frame I've had the opportunity to work very closely with Granite Construction for their Utah operations. During that time, based on the integrity of that company and the relationship that I had as a consultant with Granite in Salt Lake, I was approached for this position. Some of the reasons I accepted this position includes the personal integrity of the individuals within Granite Construction, the quality of the people and their willingness to make changes to do the right thing. They have provided me with an extreme amount of authority and that authority is based on the goal to maintain environmental compliance within all of our operations within the State. I thank you very much. I look forward to having each and every one of you recognize the improvements that Granite makes and the continuation of our commitment to protect both human health and the environment and to be a good neighbor.

Chairman Close stated thank you very much for your comments. We appreciate having you on board and hope not to see you again. That would be good. Thank you very much.

Comm. Crawford stated I echo the sentiments that we hope to not see you again. I remind the Commission that a few months ago we met in this room and, hopefully, Mr. Gianoli was necessarily pleased with the outcome. But he promised us at that time that he would do exactly this and so I compliment him and Granite Construction for moving forward with this project and, again, don't plan on seeing you much.

Mr. Walbom stated well, I'm very happy to be here.

Chairman Close moved to **Agenda Item No. VI. Coastal Energy and Newmont.**

Colleen Cripps introduced herself as the chief of the Bureau of Air Quality for the Division of Environmental Protection. She stated with me today is John Mudge with Newmont Gold Company and Chris Ranshankar and German Ibanez with El Paso Merchant Energy. We want to thank you for the opportunity to share with you a request that the Bureau of Air Quality received from Newmont and from El Paso Merchant Energy to redesignate a PSD boundary area in northern Nevada. This redesignation request has important implications for air quality, economic development and energy production and we thought that it would be important for you to hear about his proposal in the early stages of the federal approval process.

El Paso Merchant Energy is proposing to construct a 480-megawatt, natural gas fired, electric generating plant in the Boulder Valley in northern Eureka County approximately 20 miles west of Carlin. This plant will be located in hydrographic area 61 which is right there in relationship to the rest of the State. The proposed facility will constitute a major stationary source for particulate matter, carbon monoxide and nitrogen dioxide. The facility is a major stationary source that will be subject to federal regulations under the prevention of significant deterioration program or PSD. Under this program, once a PSD application is submitted, the baseline area which is currently that hydrographic basin 61 becomes subject to additional PSD requirements for all activities within that area. Just as a point of clarification, the State of Nevada has been using these hydrographic basins as PSD and non-attainment boundaries since the early 1980's. The submission of a complete PSD application permit by El Paso Merchant Energy would trigger PSD requirements within this entire boundary area.

The prevention of a significant deterioration program was designed to protect air quality in areas with clean air, not only to insure that the health standards will not be exceeded as an area grows and develops economically, but also to protect visibility in Class I areas such as the Jarbidge wilderness. One of the mechanisms the PSD program uses to

protect existing air quality is to set new air quality standards below the national ambient air quality standards within the triggered area. Any new source located within this triggered area and any modifications to existing sources located within this area would then be required to demonstrate compliance with these lower standards before a permit or permit modification, in the case of existing sources, could be issued. In order to avoid triggering the PSD minor source baseline area for the entire area 61 which would bring any new pollution sources and modifications proposed by existing sources within that basin and in this case that would be Newmont Gold and Barrick Goldstrike. Under these PSD requirements Newmont Gold and El Paso Merchant Energy are proposing to establish a separate PSD baseline area within this hydrographic basin 61. The area being proposed is the minimum baseline area required by the EPA and corresponds to the power plant property boundary. Preliminary modeling analyses indicate no significant impacts beyond the property boundary.

Although we do not need the Commission to take any action at this time, this proposal may require action on the part of the Commission in the future. On March 5th we will be holding a public meeting on this proposal in Eureka. After that meeting the Division will submit this proposal to the EPA for their review and approval. It's unclear at this time what additional steps may be required before the redesignation is finalized, but it may include some changed or existing State implementation plan. If such a change is required, we will be back before the Commission to request a formal action on that change.

Commissioner Ricci asked how long (inaudible)?

Ms. Cripps answered that's also unclear. They have 18 months under their regulations from the time we submit it to make their determination.

Commissioner Dahl asked how will this compare to the Valmy Plant as far as discharge?

Ms. Cripps answered actually I'd like to defer that question to El Paso Merchant Energy. They do have representatives here and they are going to be talking about the specifics of the power plant. I'd like to turn this presentation over now to John Mudge from Newmont Gold Company. He's going to be discussing Newmont's interest in the power plant and the need for the redesignation and then German Ibanez of El Paso Merchant Energy will provide you with some information about the power plant itself and the specifics of the impact area.

John Mudge introduced himself as the director of environmental affairs for Newmont Mining Corporation. He stated Newmont's been in the business of mining for almost 80 years. We've been mining in northern Nevada for about 35, since 1965. We're the second largest gold mining company in the world. We made about 4-1/2 million ounces last year with three million of that coming out of northern Nevada and we employ approximately 3,000 people at our mines in northern Nevada.

A couple of years ago we started investigating the concept of a power plant in northern Nevada to provide our needs for power as well as probably additional power for other needs. We were interested in a good, stable, long-term source and, as you might imagine, a good rate too that we could lock into for the long term. I think our annual power bill is in the tens of millions of dollars and I believe we're the largest single power consumers in the State of Nevada. So those sparked our interest. We've been in discussions with Coastal, now El Paso, most of that time. As we worked through our discussions, we identified the location of Boulder Valley as the best location that we could find and it's really due to the infrastructure there. There's a substation that will be about 1 mile away from this power plant. There's power transmission lines from that substation to our mining areas. There's available water. There's

available flatland that's land that Newmont owns and it's really an ideal location from those standpoints.

One of the immediate issues we identified, though, is the air shed and with that power plant potentially located in the same air shed as the mines that are in Boulder Valley that posed an issue and we identified the opportunity and had been in discussions with the Bureau of Air Quality about an air shed redesignation. It's not shown on this map, but when you see Barrick on the map, Newmont's got three major open pits and three underground operations, a heap leach and a mill in that immediate area where Barrick is shown on that map. Those are in this hydrographic basin 61. The way the PSD program works, it just doesn't work with mining. Just to step back a little bit, there's no mine in Nevada that's got a PSD permit. Our mines from an air standpoint are very well controlled. We use water sprays, baghouses, scrubbers. On our process facilities we use water and chemical binders on the roads. All of our major mines have monitors around them and from a particulate standpoint the air is very clean and well within the federal ambient air quality standards.

But this PSD program is just unworkable for mining operations. It not only lowers the standards, but the EPA details require us to utilize some factors from our large open pit areas that, in our opinion, very much overstate what emissions would be. So if PSD were triggered for our mining areas it could drastically reduce any opportunity to expand and it could even eliminate the possibility of another mine in this basin. So in looking at this we identify it in the regulatory process long regulations and rules that provide for this redesignation and it looked like the obvious way to go to accommodate this power plant as well as to accommodate our abilities to expand into the future.

Chairman Close called for questions. There were none.

German Ibanez introduced himself as representing El Paso Merchant Energy. He stated I'm the project manager of this power plant. I've distributed a packet that summarizes the power plant and the day is long and I don't want to go over things that you can read. So, why don't I open it up to questions and I can clarify points that you've read in this summary.

Commissioner Dahl stated I was just curious how this compares to the plant at Valmy. Maybe 10, 15 years ago there was a proposed plant to be just east of Wells that didn't go because of the discharge from it.

Mr. Ibanez explained essentially we're using state-of-art equipment. Valmy has a facility and an old combined cycle facility, so I don't know specifically what their heat rates are there. But ours is in 7,300 Btu per kilowatt-hour and that is state-of-the-art for the industry right now.

Commissioner Dahl asked do you anticipate a lot of opposition to the plant? There was opposition from Utah primarily that stopped the plant at Wells.

Mr. Ibanez answered actually, we've gotten a lot of support from the Elko region and we've been doing all the community work that's necessary. We've already talked to several mines that are very interested in purchasing power. We've done all of the homework that we possibly can and we've gotten a very good reception from the area. Commissioner Dahl stated well the environment's certainly different now than it was 10 years ago when it comes to power plants.

Mr. Ibanez stated sure.

Commissioner Iverson asked will all the power that you generate be sold to Newmont or will . . .

Mr. Ibanez answered no. Newmont is negotiating a power purchase agreement for 150 megawatts. We don't have off-takers now like we're negotiating power purchase agreements, but we have interested parties that we're negotiating, or we're going to talk to and El Paso may leave a portion of it for, unsubscribed.

Commissioner Iverson asked currently do those mines at Barrick and Newmont and Maggie Creek, all through there, I used to know this, but do they primarily get their power from Sierra Pacific or is it from (inaudible) the one out of (inaudible).

Mr. Ibanez answered Sierra Pacific is the provider of the electricity to them.

Commissioner Iverson asked to all of those up there?

Mr. Ibanez answered yes sir.

Mr. Mudge stated part of our power comes from (inaudible) Electric.

Mr. Ibanez stated the primary is Sierra.

Commissioner Coyner stated I would caution you that as you go forward with the proposal there will be questions to the effect of how much of this power is used in Nevada versus how much is exported. I'm sure you're thinking about that because it will be an issue in the power plants in southern Nevada as well as this Commission and others in State government continue to look at the question of merchant power, pollution of our air versus dollars and electricity to other states. So, I'm sure you'll do your homework on that.

Mr. Ibanez stated we have.

Commissioner Gifford stated just a question on availability of natural gas. We hear a lot of controversy and interesting statements about the long-term availability of natural gas. Is this current squeeze, is that the delivery system or is that the actual availability of natural gas and then what's the long-term outlook?

Mr. Ibanez stated there's been a substantial find in Wyoming and that gas is now being produced. It is constrained going east and west. There are new pipelines being put in to go east and this would be a pipeline to make it go west. This pipeline would start off in the Wyoming area. It's a joint venture with Colorado Interstate Gas and Questar to get it to mid-Utah and then Ruby Pipeline would bring it here to Nevada and that would be a CIG Colorado Interstate Gas project. On that point on price, most of the alternative gas that we see as our major competition is Canadian gas and we see that Wyoming gas would have anywhere from a dollar to half a cent differential, so we would be providing the lowest cost gas in the area.

Commissioner Ricci asked will this basically be a base-load station?

Mr. Ibanez answered yes sir.

Commissioner Ricci asked not just for peaking then?

Mr. Ibanez answered no, I mean combine cycle with two turbines with a steam turbine doesn't lend itself to turning it on and off very quickly. You have to get smaller machines to ramp up and also the loads that we are providing gold mines are 95 percent consumption load and very steady. So they have 24 hour-a-day needs.

Commissioner Dahl asked what's the capacity of the (inaudible)?

Mr. Ibanez answered 480 megawatts.

Commissioner Dahl asked and 150 of those will be used by the mine?

Mr. Ibanez answered by Newmont only.

Chairman Close asked is this conditioned upon deregulation?

Mr. Ibanez stated we'd like deregulation. Newmont's worked out a letter of intent with Sierra saying that they wouldn't stand in objection from any customer buying gas, or buying electricity from this power plant. But we are proponents for deregulation.

Chairman Close asked and also Wells Electric I presume?

Mr. Ibanez answered Wells is interested in the gas pipeline more than, they see the power plant as somewhat of a competition. They see it that way. We don't see it. We're doing other loads that they really don't serve.

Commissioner Johnson stated I applaud you for progressing with this plan. I think it's an advantageous economic development and also may perhaps replace some facilities that are more polluting in the future. But my concern is simply that there is an existing regulation and why we're hearing this is that we will solve the potential violation by simply redefining the area that we calculate air quality.

Mr. Ibanez stated what we are doing is helping the customer, the gold mines, to make sure that their businesses aren't affected by putting in power plants in that location.

Commissioner Johnson stated if you put it over the hill, in the other basin, we wouldn't be concerned with that.

Mr. Ibanez stated that's correct, but there's an added cost to the power plant if we do that in the order of \$15 to \$20 million.

Mr. Mudge stated there isn't an existing violation at all now in place. The mines are less than PSD and are in compliance. The power plant is some 10 miles away from the mines and there isn't even an overlap of emissions to any significant effect and the regulations clearly provide, under the PSD program, for states to be able to redesignate air sheds to allow for this economic growth for this very thing. So it's not to get out of any violations, really to take advantage of the PSD regulations.

Commissioner Johnson stated I appreciate that you're not in violation now and if I said that I didn't mean to. But it's the potential impact either upon your expansion or the expansion of the power plant or other industrial uses (inaudible). If we don't reassign the space and any other economic activity within that basin at it's decline now would potentially impact future activities. That's the reason you are wanting to do this right?

Mr. Mudge answered yeah and it's really a paperwork exercise in that when we propose a new mine we model emissions, the PSD program requires us to use certain factors that overstate and would show a paper exceedance of this PSD number when, indeed, there probably isn't.

Commissioner Johnson asked do you have the monitoring data matched against the modeling of previous activities and how that confirms your statement that they overstate the emissions?

Mr. Mudge answered well the answer to that question is long and involved, but the Nevada Mining Associations work with the Bureau of Air Quality and supply the volumes of information and some studies out of Wyoming that have demonstrated the emission factors and the modeling don't match up with the monitoring and very much overstate them.

Commissioner Johnson asked is this model dictated by federal EPA or is there a process by which you can be changed . . .

Mr. Mudge answered it's federal EPA.

Commissioner Johnson asked and is there a process for changing that federal standard and are we progressing at attempting to do that?

Mr. Mudge answered we haven't been involved in the process to do that. There was an amendment in the Clean Air Act by Senator Simpson out of Wyoming that required the EPA to do some investigations that way and I think they came to the same conclusion. But I don't know that they've progressed any further as far as new factors and such. Commissioner Johnson asked that would be another avenue to look at this problem, right?

Mr. Mudge answered possibly. That's a giant unknown and a lot further outside of our control.

Ray Bacon introduced himself as being with the Nevada Manufacturer's Association. He stated I've kind of been on the fringe of this issue and been paying attention. I thought it's probably appropriate for this panel to understand that the Commission on Economic Development has gone ahead and reviewed the issue of rural development and one of the things that keeps coming up time and time again is the need for natural gas resources and additional power resources in rural Nevada, particularly northeast Nevada if you're going to do anything which is going to wind up broadening the economic base of that area. So, from that standpoint, this thing has huge potential as far as the long-term survivability, assuming that at some point in time either by federal regulation or just the ore runs out, that mining starts to decline in rural Nevada. So there are huge long-term economic benefits and, of course, as they pointed out, once that power is on the grid that power then becomes available to move to other parts of the State and potentially even out of state. There might even be economic advantages for some of that power to move out of state. So there are a lot of pro's to this thing and I think what they're doing is a major step in the right direction. If rural Nevada becomes more economically viable in the future you wind up with, as your role where there is a dramatic shift right now in the tax base from the urban areas toward those rural areas because of their economic viability issues, this has the potential to level that playing field substantially. So, policy-wise, long-term for the State's benefit, it's a huge issue.

Commissioner Johnson stated I believe there's also a proposal to build an inter-tie from the Carlin area into the Ely area which would provide potential power to this plant or other plants to the southern Nevada market also.

Chairman Close stated I believe there's no action to take on this. It's merely an informational presentation. We appreciate it. Thank you very much. David is there any reason why we have to take these other issues now or can we leave them or is there something or is there somebody here to testify on any of these settlement agreements?

Mr. Cowperthwaite answered I think not Mr. Chairman. I think that in terms of the settlement agreements, I've been told, though, that we're out of time for use of this room. The hearing has been designed to be able to move forward to the next day.

Chairman Close stated the only thing that I'm thinking about is Mr. Bennett. Have we got a problem with him or do we just let him glide again?

Mr. Cowperthwaite stated he is not here at this point.

Chairman Close stated I understand that.

Mr. Cowperthwaite stated he has indicated that he will not come to these hearings.

Chairman Close asked so we will schedule him again next month, next meeting?

Mr. Cowperthwaite stated if that is your pleasure, I can do that.

Chairman Close stated he is scheduled this time and he's not going to be here, so we'll leave that up to your discretion.

Mr. Cowperthwaite stated if we do work tomorrow we could certainly settle up on that.

Chairman Close stated I don't think we'll work tomorrow.

Mr. Cowperthwaite stated okay, we're done with our business.

Chairman Close stated this will conclude our business unless you have something else you think has to be taken.

Mr. Cowperthwaite stated we don't have the option. We have to leave the room.

Chairman Close asked is there anything else on that requires us to stay over tomorrow?

Mr. Cowperthwaite stated we have the settlements and the other petitions that could be held over to the next meeting which will probably be scheduled in April. We'll be dealing with some air quality issues.

Chairman Close stated we have time I think to take the settlement agreements if you want.

Mr. Cowperthwaite stated no, there's too many of them.

Chairman Close asked is that an important issue for you to have that resolved?

Mr. Cowperthwaite answered no. I get the nod from the staff there that we can hold on it. The settlements are already prepared. It's just a question of you making the ratification upon it at some point in time.

Chairman Close stated so what you're saying is we are finished so far as you are concerned. There's nothing pressing that requires us . . .

Mr. Cowperthwaite stated nothing pressing that demands that a decision be made.

Meeting adjourned at 5:20 p.m.

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