



# STATE OF NEVADA

Department of Conservation & Natural Resources

*Jim Gibbons, Governor*

*Allen Biaggi, Director*

DIVISION OF ENVIRONMENTAL PROTECTION

*Leo M. Drozdoff, P.E., Administrator*

**August 28, 2007**

## **NOTICE OF DECISION**

**PERMIT NUMBER NEV60025**

### **NORTH VALLEY WASTEWATER TREATMENT FACILITY**

The Nevada Division of Environmental Protection (Division) has decided to issue Permit NEV60025 authorizing the discharge of treated effluent to groundwater via percolation from the Wetlands, flood irrigation of agricultural tracts and re-use for on-site vegetation, rapid infiltration basin(s) (RIB(s)) and on-site dust control/construction use in accordance with the terms and conditions of Permit NEV60025. The Division has been provided with sufficient information, in accordance with Nevada Administrative Code (NAC) 445A.228 through NAC 445A.263, to assure the Division that groundwater quality will not be degraded from this operation and that public safety and health will be protected.

This permit will become effective September 3, 2007. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to Nevada Revised Statutes (NRS) 445A.605 and NAC 445A.407. The appeal must be requested within fifteen (15) days of the date of this notice of decision and in accordance with administrative rules of the State Environmental Commission and NRS 233B.

## **RESPONSE TO COMMENTS**

### **Letter from Stephen L. Bennett, 2906 La Cresta Circle, Minden, Nevada 89423, dated July 25, 2007**

#### **1.1**

Comment: ...will there be a record of comments and responses at the August 1 meeting [Public Hearing]? Where will it be available? Will it be included in the final determination?

Response: The Hearing will be recorded. Once transcribed, the transcript will be available at the Division office for copying. The transcript will be included as part of the final determination. It will be made available to anyone upon request.

#### **1.2**

Comment: Comments not related to water quality cannot be considered. I believe that any issue raised in the draft “Authorization to discharge” is a legitimate subject for discussion and that it would be improper for the Division to limit the comments to water quality alone.

Response: All decisions regarding this permit must be based on NRS and NAC Chapter 445A. The Division cannot go beyond the authority granted to it by the Legislature through NRS and NAC 445A.

### 1.3

Comment: [Part I.A.1.] Will Division approve Phase II? Will flow increase to 1.0 MGD be authorized when Phase II implemented? Phase II should be further described. Can Draft Permit apply for increased flow if there are works that require further approval? It seems that the Draft Permit is insufficiently detailed as to the scope of the works for which it will apply.

Response: It is the intent of the Division to approve Phase II after applicant has complied with all permit requirements, in accordance with the Division’s Technical Services Branch (TSB) reviews and approvals, including but not limited to the new treatment plant design and construction, the effluent storage basin, the Bently Kirman Tract (NEV 2002505) permit approval (renewal with modifications) and the installation of additional monitoring wells.

### 1.4

Comment: [Part I.A.1.] Define “Consumptive Use Balance”. How will ‘Consumptive Use’ be determined for Outfall 5 without reference to use by Bently under permit 2002505?

Response: Cumulative Use Balance is described as a crop’s total annual water requirement, and takes into account precipitation, evapotranspiration, the efficiency of the irrigation system, and the salt tolerance of the plant species. *WTS-1B* demonstrates how to calculate a consumptive use balance. *WTS-1B: Appendix One: Plant Consumptive Use Worksheet* is available on the NDEP website at the following address: <http://ndep.nv.gov/bwpc/fact01.htm>. The Bently Kirman Tract (NEV2002505) is a stand-alone permit. An Effluent Management Plan (EMP) with a consumptive use balance is required for NEV2002505 and will be required as a condition when the permit is modified to accept North Valley Wastewater Treatment Facility (NVWWTF) effluent.

### 1.5

Comment: [Part I.A.2.b.] Why aren’t the locations of these wells (MW-4, MW-5) stipulated in this permit? The groundwater monitoring program is considered a ‘minor modification’ to this permit.

Response: The general locations of the new monitoring wells are described in the Groundwater Monitoring section (page 3) of the Fact Sheet. Additionally, new monitoring well (MW-6) will be installed approximately 250 feet due north of the pilot RIB. The exact locations will reflect the requirements of *WTS-4: Guidance Document for the Design of Groundwater Monitoring Wells*, and will be approved by the TSB prior to installation. The installation and use of additional wells will be considered a minor modification to the permit, not the monitoring program itself.

### 1.6

Comment: [Part I.A.2.] What measures will be additionally undertaken between the NVWWTF [and Bently irrigation areas] and the Carson River to check on the flow and quality of groundwater resulting from possible

leaks in the HDPE reservoir lining, the 24" pipeline to Bently, the 8" lines to the RIBs and other Phase II improvements.

Response: There will be two (2) existing monitoring wells and three (3) new monitoring wells surrounding the pilot RIB and the 39.7-acre effluent storage basin to check for proper operation of the pilot RIB. Parameters are stated in the Groundwater Monitoring Requirements table in Part I.A.2.d. of the permit. These parameters shall be monitored on a quarterly basis. A groundwater monitoring program is a part of the Bently (NEV2002505) permit and will remain when the permit is modified to accept NVWWTF effluent. Flow to the Bently Kirman Tract will be measured via a flow meter to the irrigation tract as per the Effluent Limitations table in Part I.A.1.b. of the permit.

### 1.7

Comment: [Part I.A.3.] ...'there shall be no objectionable odors from the ...' is subjective... Part I.A.18c.v. addresses odors with regards to the O&M Manual but not how odors will be controlled. The existing plant already emits objectionable odors... Douglas County is not in compliance with their permit. Should include details of odor control in permit. Provide name of the person at NDEP for complaint contacts. Major issue with downwinders.

Response: Your comment regarding the subjectiveness of objectionable odors is noted. The Douglas County Community Development (DCCD) plans to install two (2) "Solar Bee" mixers in the effluent storage basin. This along with wind action should keep the basin in an aerobic condition. A backup plan to install mechanical aerators in the basin will be used if the Solar Bees fail to control odors. The DCCD also intends to install odor controls at the new Phase II headworks. These controls shall be installed before the Phase II is allowed to operate. Details of the odor control plan are available through the TSB. The general telephone number for the BWPC is 775.687.9418. Any complaints, questions etc. will be directed to the correct staff member if the above phone number is called. It is suggested that you first contact the DCCD in an attempt to mitigate the problem. As requested, telephone numbers for the DCCD are as follows:

Engineering Division – 775.782.6235

Sewer and Water Utilities – 775.782.6227

NVWWTF – 775.782.9989 or 775.690.6470

### 1.8

Comment: [Part I.A.4.] The facility operation shall not cause or contribute to the propagation of pests or vector nuisances, including mosquitoes. How is this going to be implemented? The specifics of vector control should be part of permit as an appendix, not as part of the O&M Manual alone.

Response: The DCCD intends to work with the Douglas County Mosquito Control District if a mosquito problem develops. While the permit is a "stand alone" document, it is also a part of a total package which includes the application, the fact sheet, the public notice, plans submitted, technical reviews of plans submitted, all related correspondence, O&M manuals, effluent management plans etc. All of the documents are available to the public for review and copying upon request. All BWPC records regarding this facility, including plans, are public records, and are available for review upon request.

### 1.9

Comment: [Part I.A.8.] Where will the sludge be generated and/or stored until disposed? What quantities are likely and how long will they be stored on site before removal? Another source of odors?

Response: The sludge is generated in the clarifier. From the clarifier the sludge is wasted to the thickening basin. From the thickening basin, the sludge is transferred to the sludge storage pond. Storage is “long term” (up to two (2) years).

**1.10**  
Comment: [Part I.A.9, 10] The facilities shall be constructed “in accordance with plans approved by the Division.” The listing of approved plans needs to be included within the Permit and the drawings and specifications should be available for inspection as part of the Division’s files.

Response: While the permit is a “stand alone” document, it is also a part of a total package which includes the application, the fact sheet, the public notice, plans submitted, technical reviews of plans submitted, all related correspondence, O&M manuals, effluent management plans etc. All BWPC records regarding this facility, including plans, are public records, and are available for review upon request.

**1.11**  
Comment: [Part I.A.11.] EMP must be approved by Division before requested modifications are put into operation. Outfall 005 will require EMP from Bently. Has Bently EMP been submitted? Bently EMP part of Permit NEV2002505. Bently EMP will dictate the operation of the effluent storage basin. Effluent discharge to Bently will affect the operation of the aerators which in turn affect odor control. Will aerators operate properly at low water levels in the basin? Will varying water levels in basin affect the integrity of the HDPE lining? The Bently EMP is essential to the proper operation and pollution control and cannot be separated from the Permit.

Response: This section applies to the NVWWTF permit (NEV60025) only. An EMP for on-site irrigation, dust control and construction use must be approved prior to putting requested modifications into operation. Additionally permit NEV2002505 must be modified to accept NVWWTF effluent prior to the NVWWTF delivering treated effluent to the Bently Kirman Tract. The Bently Kirman Tract permit (NEV2002505) is a stand-alone permit. The “Solar Bee” mixers require approximately 3 to 5 feet of liquid level for proper operation. The 3’ minimum effluent depth will be adequate to protect the liner from damage from the “Solar Bee” mixers. The varying water levels will not affect liner integrity. The HDPE liner is treated to resist UV light and the manufacturers suggest an approximate 20-year life span when the liner is exposed to the elements.

**1.12**  
Comments: [Part I.A.16.] The prerogative to reopen and re-evaluate the permit should not be narrowly construed to ‘demonstrate effluent toxicity or conditions confirmed by subsequent monitoring date.’ This section should be more broadly written to include any violation of the permit requirements.

Response: This section does not restrict reopening solely for demonstrated effluent toxicity.

**1.13**  
Comments: [Part I.A.18.c.iv.] While the O&M plan should include the provisions for control of mosquitoes, the specifics of this control should be outlined in an appendix to prevent inadvertent glossing over this important consideration during the preparation of the O&M Manual.

Response: DCCD feels that mosquitoes will not be an issue at this facility, However, the DCCD has proposed two methods to control mosquitoes should they become a problem. See response to 1.8. See response to 1.10

### 1.14

Comment: [Part I.A.18.e.&f.] The second ‘e’ and ‘f’ (Part I.A.18.e&f) are identical and the outline numbering needs to be checked.

Response: Thank you for this observation. The issued permit has been corrected.

### 1.15

Comment: [Part II.A.2] Under the stated aim of using effluent for irrigation, the requirements to maintain the treatment facilities in good working order must include Bently’s works under permit [NEV]2002505. How are these conditions going to be coordinated.

Response: The language used in Part II.A.2 is standard language used in all permits. This language will be included in the Bently permit (NEV2002505).

### 1.16

Comment: [Part II.A.4] How is this section going to be coordinated with Bently’s works? If something goes wrong with on the Kirman tract, how will liability be assessed? How will penalty obligations be determined?

Response: The language used in Part II.A.4 is standard language used in all permits. This language will be included in the Bently permit (NEV2002505). Liabilities and penalty obligations will be determined on an individual basis by the Division.

### 1.17

Comment: It is insufficient to consider the NVWWTF by itself. The increasing load in the area provided by increasing the plant output from 0.45 MGD to 1. MGD [with a further plan to increase later to 2.0 MGD] should be considered with the likely increasing ground water load from Incline Village and the Indian Hills GIDs. The combined load from these facilities should be reviewed with regard to the quality of the Carson River. At what point does the combined infiltration overcome capacity of the underlying strata? How can the groundwater be monitored and checked between WWTFs and the river such that any future problem can be anticipated? At what point does tertiary treatment become necessary and planning for such implemented? As the load increases, the monitoring of the quality, especially location and frequency of readings, should be re-examined and upgraded accordingly. We should take this opportunity to review all the impacts of wastewater treatment at this location on the Carson River to assure that the goals of the Water Quality Management 208 plan for the Carson River Basin are being met. It is appropriate for NDEP to review this permit [and others] in light of overall water quality impact, and make a statement as to the effect that the increased flows will have.

Response: This response is provided by Mr. Sam Stegeman, Nevada Division of Environmental Protection, Bureau of Water Quality Planning. A primary purpose of a 208 Water Quality Plan is to identify and disclose activities, such as waste water treatment facilities, that will potentially impact the water quality of water bodies such as the Carson River. The 208 plan is utilized for planning purposes and in itself does not rise to design level discussion for individual facilities outside of feasibility or possibly conceptual analyses. The questions you pose regarding facility development and water quality monitoring to assure no adverse impacts to a water body by the facility development are addressed during the permit development and facility design review procedures by the Division. The controls established during this design review and permit process by the Division reflect the monitoring and reporting necessary to protect the water body water quality. The regular and routine information provided by the applicant is assessed by the Division to identify water quality protection concerns or problems that may develop. The information is used by the Division and applicant to address any

identified problems by applying adaptive management procedures to maintain protective water quality standards. The 208 Water Quality plan goals are met by applying all the Division programmatic elements for permitting, monitoring, and compliance assessment.

**Letter from Corwin J. Bemis, 2920 La Cresta Circle, Minden, Nevada 89423, dated July 25, 2007**

**2.1**

Comment: (a) This is to voice my concerns regarding the modification and renewal of the referenced permit, which would permit the County to discharge over double the amount of secondary treated sewage effluent to the area near and adjacent to Incline Village General Improvement District (IVGID) Wetlands.

(b) The County of Douglas has chosen to locate their “regional waste water treatment Plant” immediately abutting these wetlands, which are immediately adjacent to the Carson River. I must think that such a discharge is likely to degrade the river quality downstream to this area.

Response: (a) Your concerns are noted. The sewage at the NVWWTF is now receiving tertiary treatment (Wastewater Engineering Treatment and Reuse, Metcalf & Eddy, 2003). The NVWWTF discharges effluent of high quality. The following are characteristics of the discharged effluent from January 2005 through December 2006:

CBOD <sub>5</sub> (mg/L)	TSS (mg/L)	pH (standard units)	Total Nitrogen (mg/L)	Nitrate (mg/L)	Chlorine Residual (mg/L)	Dissolved Oxygen (mg/L)
11	8	7.64	6.0	3.3	1.9	6.0

The effluent limitation for fecal coliform is established at 2.2 mpn/100 ml (30-day average) in the renewed permit. (b) Your comment is noted. The placement of the various components of the wastewater treatment facility is a local issue and must be resolved with your local government authorities.

**2.2**

Comment: To make matters even worse, the County is planning to increase their discharge to a full 2 MGD in the next phase.

Response: The County has requested an increase in flow from 0.45 MGD to 1.0 MGD. If the County wishes to increase flow in the future, application must be made and the Division will consider the request at the time an application is received.

**2.3**

Comment: (a) I propose it would be prudent to require the County to treat to a tertiary level and meet the discharge requirements of the Nevada Bureau of Water Pollution Control thus allowing the discharge directly into the Carson River. (b) The construction and interim use of a 40-acre holding reservoir for secondary treated effluent would then be unnecessary.

Response: (a) See response to comment 2.1.a. The County has not requested authorization to discharge to the Carson River. (b) Your comment is noted.

## 2.4

Comment: As you know, the County intends to award the contract to construct this reservoir in August 2007, which without this modification would be a violation of their existing permit.

Response: The County's procurement practices are beyond the scope of the Division's regulatory authority.

## 2.5

Comment: (a) Another matter of concern is the fact that this permit modification will seemingly permit the County to use the Kirman Tract (Bently) as a re-use irrigation site. (b) It is my understanding that another discharge permit (NEV2002505) is required to do that and that permit is not yet noticed as a proposed action. (c) It does not seem prudent to allow the discharge of secondary treated effluent directly onto land that is part of the watershed of the Carson River hoping that the contaminants will not reach that channel.

Response: (a) The County has requested the reuse of effluent be authorized at the Bently Kirman Tract. (b) The Bently Kirman Tract is now permitted (permit NEV2002505) to irrigate with treated effluent from the Incline Village GID. Bently must request the modification of permit NEV2002505 and receive authorization from the Division in order to accept effluent from NVWWTF. The NVWWTF will not be authorized to deliver effluent to the Bently Kirman Tract unless permit NEV2002505 is modified. (c) See response to comment 2.1.a.

### **Email from John A. Haug, 2919 La Cresta Circle, Minden, Nevada 89423, , dated May 9, 2007.**

## 3.1

Comment: (a) This permit application is of great importance to those of us in Saratoga Springs Subdivision who are adversely effected by the proposed construction of a Sewage Effluent Storage Basin immediately at the borders of many homes in our subdivision. (b) There will be a mass protest to the issuance of this permit which will enable the taking of property (diminished property value) should this project be allowed to proceed as presently planned. (c) We are also concerned that the environmental impact process for this project is, to date, non existent.

Response: (a) Your comment is noted. (b) Groundwater discharge permits are written under the authority of Nevada Revised Statutes (NRS) and Nevada Administrative Code (NAC) Chapter 445A. NRS and NAC Chapter 445A do not address property values. (c) NRS and NAC Chapter 445A has no authority for the submittal of a comprehensive environmental impact review.

### **Letter from John A. Haug, 2919 La Cresta Circle, Minden, Nevada 89423, , dated July 4, 2007.**

## 4.1

Comment: (a) This is to voice my objection to the modification and renewal of the referenced permit, which would permit the County to discharge over double the amount of secondary treated sewage effluent to the already highly contaminated Incline Village General improvement District (IVGID) Wetlands. (b) The County of Douglas has precipitously elected to locate their "regional waste water treatment Plant" immediately upstream of these wetlands, which are physically connected to the Carson River. I cannot help but realize that this action will adversely affect the quality of the water in this river and likewise degrade the environment downstream of this discharge. (c) Furthermore, this increase in discharge on these wetlands will surely

reduce the viability of the site for IVGID discharges once the increase begins. I doubt that IVGID would even agree to the County taking up their reserve capacity.

Response: (a) Your concerns are noted. See response to comment 2.1.a. (b) Your comment is noted. The placement of the various components of the wastewater treatment facility is a local issue and must be resolved with your local government authorities. (c) The NVWWTF has not requested an increase in flow to the IVGID Wetlands.

#### 4.2

Comment: To make matters even worse, the County is planning to increase their discharge to a full 2 MGD in the next phase.

Response: See response to comment 2.2.

#### 4.3

Comment: (a) It is imperative to require the County to clean up its proposed discharge to a tertiary level (or higher) and meet the discharge requirements of the Nevada Bureau of Water Pollution Control to discharge directly into the Carson River. (b) Construction and interim use of a 40-acre (434 acre ft) holding reservoir for secondary treated effluent in hopes that yet another discharge permit is granted (NEV2002505) is ludicrous.

Response: (a) See response to comment 2.1.a. The County has not requested to discharge into the Carson River. (b) Your comment is noted.

#### 4.4

Comment: As you undoubtedly know, the County intends to award the contract to construct this reservoir [effluent holding basin] on August 2, 2007, which without modification would be a violation of their existing permit. This doesn't seem to concern them.

Response: See response to comment 2.4.

#### 4.5

Comment: (a) Another matter of concern is the fact that this permit modification will seemingly permit the County to use the Kirman Tract (Bently) as a re-use irrigation site. (b) It is my understanding that another discharge permit (NEV2002505) is not yet noticed as a proposed action. How can action be taken on one permit without consideration of the other? (c) It is my opinion that his whole proposition is an ill-conceived plan to saddle the residents of Saratoga Springs Subdivision with a 42-acre sewage effluent reservoir in our back yards without considering the adverse effect on our quality of life. (d) We anticipate noxious algae growing on the surface of this reservoir, as well as odors and worst of all mosquitoes, all as can be seen on, in and around the water reservoirs surrounding the Sunridge Golf course just to our north. This water is also secondary treated sewage effluent with all the attendant nutrients still in it.

Response: (a) See response to comment 2.5.a. (b) See response to comment 2.5.b. (c) Quality of life issues are beyond the regulatory authority of the Division. (d) The issues of odors and mosquitoes are addressed in the Fact Sheet and permit. The NVWWTF has developed acceptable solutions to these issues and will address them in its O&M Manual. See response to comment 2.1.a.

**Letter from Harvey Johnson, Utilities Superintendent, Incline Village Public Works, 1220 Sweetwater Road, Incline Village, Nevada 89451, dated July 2, 2007**

**5.1**

Comment: I am writing this letter to express our unfavorable position to the rapid infiltration basins (RIB) to be allowed in the wastewater permit for the North Valley Wastewater Treatment Facility. We own and operate the 900 acre Incline Village Wetlands Enhancement Facility to the north between the Carson River and the North Valley facility. The Wetlands Enhancement Facility is IVGIDs permitted effluent disposal location.

Response: Your comment is noted.

**5.2**

Comment: It is our experience operating the Wetlands Facility for 23 years, the geology is not conducive to rapid infiltration basins because of a sand layer over mineral lenses. The effluent will infiltrate the loose sand layer from the RIB and reach the underground mineral lenses. The low mineral content of the effluent will dissolve the mineral lenses in the ground creating piping that can connect with one of many underground streams that flow north. We have encountered these streams repairing the short circuiting of our ponds. There are numerous springs on our site. We believe, over time, the effluent put in the RIBs would certainly short circuit to one or more of these springs. The effluent would either surface in the hot springs portion of our wetlands that flow directly to the Carson River or would surface in one of the springs in our wastewater wetlands that would diminish our capacity. Either way this has the potential to cause a negative effect on our facility.

Response: See response to comment 1.6. The RIB authorized by this permit is a single pilot RIB to physically test computer modeling performed by the NVWWTF. Computer modeling has shown that subsurface flow from the NVWWTF is toward the river in a northwesterly direction, i.e., away from the IVGID Wetlands. If the RIB shows that the computer modeling is in error, no further RIBs will be authorized for construction and the pilot RIB will be decommissioned.

**5.3**

Comment: The Incline Village General Improvement District would appreciate this comment be placed in the record for the public comment for the North Valley Wastewater Treatment Facility permit process.

Response: Your comments are part of the NVWWTF record.

**Letter from Brian Kaspar, 2971 San Mateo, Minden, Nevada 89423, dated July 23, 2007**

**6.1**

Comment: (a) Objects to modification and renewal of permit NEV60025 (NVWWTF). (b) It would allow County to increase discharge to "already highly contaminated IVGID Wetlands." (c) This "regional waste water treatment plant" is located immediately upstream of these wetlands. (d) This will adversely affect the quality of the water in this river [Carson River] and degrade the environment downstream of this discharge. (e) This increase in discharge on these wetlands will surely reduce the viability of the site for IVGID discharges once the increase begins. (f) I doubt that IVGID would even agree to the County taking up their reserve capacity.

Response: (a) Your comment is noted. (b) The County has not requested an increase in flow to the IVGID Wetlands. (c) See response to comment 1.6; See response to comment 5.2. (d) See response to comment 2.1.a. (e) See (b) above. (f) See (b) above.

## 6.2

Comment: To make matters even worse, the County is planning to increase their discharge to a full 2 MGD in the next phase.

Response: See response to comment 2.2.

## 6.3

Comment: (a) It is imperative to require the County to clean up its proposed discharge to a tertiary level (or higher) and meet the discharge requirements of the Nevada Bureau of Water Pollution Control to discharge directly into the Carson River. (b) The construction and interim use of a 40-acre (434 acre ft) holding reservoir for secondary treated effluent in hopes that yet another discharge permit is granted (NEV2002505) is ludicrous.

Response: (a) See response to comment 2.1.a. (b) Your comment is noted.

## 6.4

Comment: As you undoubtedly know, the County intends to award the contract to construct this reservoir [effluent holding basin] on August 2, 2007, which without modification would be a violation of their existing permit. This doesn't seem to concern them.

Response: See response to comment 2.4.

## 6.5

Comment: (a) Another matter of concern is the fact that this permit modification will seemingly permit the County to use the Kirman Tract (Bently) as a re-use irrigation site. (b) It is my understanding that another discharge permit is not yet noticed as a proposed action. How can action be taken on one permit without consideration of the other? (c) It is my opinion that his whole proposition is an ill-conceived plan to saddle the residents of Saratoga Springs Subdivision with a 42-acre sewage effluent reservoir in our back yards without considering the adverse effect on our quality of life. (d) We anticipate noxious algae growing on the surface of this reservoir, as well as odors and worst of all mosquitoes, all as can be seen on, in and around the water reservoirs surrounding the Sunridge Golf course just to our north. This water is also secondary treated sewage effluent with all the attached nutrients still in it.

Response: (a) See response to comment 2.5.a (b) See response to comment 2.5.b. (c) See response to comment 4.5.c. (d) See response to comment 4.5.d.

**Email from Deborah Larsen & Carl Larsen, 2928 La Cresta Circle, Minden, NV 89423, dated May 10, 2007.**

## 7.1

Comment: We are writing to request being notified when the Retention Pond Project (NEV600255) becomes open for public comment. My husband and I attended the meeting on the 8<sup>th</sup> of May with the Douglas

County Planning Commission to amend the Special use Permit to allow for the construction of the pond. As you may already know, it is being constructed within a stone's throw of half million dollar homes. We own one of these homes. We live at 2928 La Cresta Circle.

Response: You are on our mailing list for this project and a copy of the Notice of Proposed Action/Notice of Public Hearing was mailed to you.

## 7.2

Comment: At the time we purchased our home, we asked the sales agent, Bob Taft, who was the representative for the developer, Bill Nichols, what if anything would be built on the land to the north of our subdivision on the vacant land. Many of us in Saratoga Springs Estates were told it was BLM land and that nothing would be built. We believe at this point, that the buyers were deliberately misled as we have learned subsequently that the developer and builder had originally planned a golf course to be build on our open space AND it was to be watered by the effluent from the ponds that are now being proposed to be built. While we realize that in Nevada the disclosure laws do not include Sewer Facilities, we do not think it was ethical for the developer to hide this information from the prospective buyers of the homes. We certainly would not have bought my home here had I known what was planned!!

Response: Groundwater discharge permits are written under the authority of NRS and NAC 445A. NRS and NAC 445A do not address the above issues.

## 7.3

Comment: There are, as you probably have already been apprized of, many negative impacts to our development regarding the pond. Loss of views, (for which many of us paid a hefty lot premium), odors, mosquitoes, to name just a few, and certainly the potential for devaluation of our homes!!!

Response: Odors and mosquitoes are addressed in the issued permit under sections I.A.3. and I.A.4., respectively and under sections I.A.18.c.v. and I.A.18.c.iv., respectively. NRS and NAC 445A do not address visual aesthetics or property values.

## 7.4

Comment: Please do what you can to help the homeowners in Saratoga Springs Estates find a suitable compromise to the existing project.

Response: Your comment is noted.

### **Email from Ed & Bonnie Martin, 2936 La Cresta Circle, Minden, Nevada 89423, dated June 4, 2007.**

## 8.1

Comment: My husband and I are very concerned about the quadrupling of the capacity of the North Valley Waste Water Treatment Facility and construction of a 41 acre effluent storage reservoir within a few hundred feet of Saratoga Spring's residences.

Response: The NVWWTF has requested increasing flow from 0.45 MGD to 1.0 MGD

## 8.2

Comment: We live within 1320 feet of the project at 2936 La Cresta Circle. Our main concerns are:

1. The effect on our property values and the ability to sell our home at market value
2. The odors which will certainly occur, regardless of any measures taken to prevent them
3. The mosquito breeding which will take place
4. The construction dust, debris, and noise which will occur during construction

Response: (1) See response to comment 3.1.b. (2) See response to comment 1.7. (3) See response to comment 1.8. (4) These issues are not addressed by NRS/NAC 445A. However, NVWWTF has requested that the treated effluent be authorized to be used for on-site dust control.

### **Letter from Lynn Muzzy, 2924 La Cresta Circle, Minden, Nevada 89423, dated July 26, 2007.**

## 9.1

Comment: Mr. Muzzy is in support of the comments and recommendations made by Mr. Steve Bennett and Mr. John Haug

Response: See response to comments 1.1 to 1.17, 3.1 and 4.1 to 4.5.

### **Email from Russ Noragon, 1165 San Marcos Circle, Minden, Nevada 89423, dated May 30, 07.**

## 10.1

Comment: Having attended the Planning Commission on May 8<sup>th</sup>, and learning that it was an exercise in futility, I would like to be informed when the next public comment period is open in regards to the above mentioned project. It seems that the County is going at this all wrong by placing such a reservoir upwind and so close to our community here in Saratoga Springs when other, less volatile, locations could certainly be found.

Response: This issue is beyond the regulatory authority of the Division.

## 10.2

Comment: In my opinion, if Bently wants the reclaimed water so badly, why not make a deal with him to place the pond on his property close to where it's going to be used? It has to be pumped out there anyway, why not pump it directly to where it's needed?

Response: This issue is beyond the regulatory authority of the Division.

### **Email from Patti Pease [peasepl@charter.net], Saratoga Springs Subdivision, San Marcos Circle, Minden, Nevada 89423, dated May 30, 2007.**

## 11.1

Comment: I am in the process of building a home on San Marcos Circle in Saratoga Springs and am against the building of the waste water treatment facility. I have already noticed a foul smell from the existing facility and do not want to be subject to more of the same from this new project. The smell will not only come from the new facility but I suspect that when the grey water is used for irrigation we will be subject to the smell

from that area also. In addition to this, my property value will be impacted and the mosquito problem will worsen.

Response: See response to comment 1.7 Odors will also be addressed in the re-use permit (Bently Kirman Tract, NEV2002505) when that permit is modified to accept treated effluent from the NVWWTF. Groundwater discharge permits are written under the authority of NRS and NAC Chapter 445A. NRS and NAC 445A do not address property values. See response to comment 1.8.

## 11.2

Comment: I have done some research into this type of treatment facility and cannot find any guarantees that a facility of this type will not emit offensive odors. Apparently "state of the art" odor control facilities can not control 100% of the odors. With the warm summer days/evenings and the prevailing winds we are sure to be subject to more foul smells and an increasing mosquito population!

Response: See response to 11.1.

## 11.3

Comment: It has been recommended that if odors become an issue at the site, either an electric or solar aerator is recommended to be installed. Who would pay for this device.....the citizens affected, the land owner who would be the sole benefactor of this project, or the county....and how long would it take to have this approved?

Response: "Solar Bee" solar powered mixers have been approved for the effluent holding basin and are to be installed prior to the use of the basin. NRS and NAC 445A do not address who will pay for this project.

## 11.4

Comment: There are too many questions that have yet to be answered. Why must the facility be built so close to residential areas? Where can I find the Environmental Impact Report? Who, except Mr. Bently will benefit from this project? Is the County willing to receive less taxes once our properties have been devalued?

Response: The above issues are beyond the scope of the authority of the Division. NRS and NAC Chapter 445A has no authority for the submittal of an environmental impact report.

## 11.5

Comment: I would appreciate being notified when the public comment period is open with regards to this project.

Response: Your name is on our mailing list for this project and you were Emailed a copy of the Notice of Proposed Action/Notice of Public Hearing.

## **Email from Camille Reynolds, creyn92465@aol.com, dated May 30, 2007.**

### 12.1

Comment: I am a concerned property owner in the Saratoga Springs neighborhood in north Minden. It is Douglas County's intent to develop a treatment pond adjacent to my home. I have read the information that the county has provided to us and their explanations of the concerns raised by the neighbors, troubles me. Nowhere

does it say who the experts (if any) were consulted in these issues. It is my understanding that it is most likely "staff", these are no experts on the environment and OUR well being. I am asking you today how I can obtain an Environmental Impact Report on this subject property, if there has not been one completed may I ask how we can allow something like this to proceed. Your prompt response is appreciated.

Response: See response to comment 11.4.

**Letter from Trish Wardlow, 2918 La Cresta Circle, Minden, Nevada 89423, dated July 29, 2007.**

**13.1**  
Comment: Ms. Wardlow is in full support of comments and recommendations made by Mr. Steve Bennett, Mr. John Haug and Mr. Nick Nolte.

Response: See response to comments 1.1 to 1.17, 3.1, 4.1 to 4.5 and 14.1 to 14.8.

**Letter from John Nolte, 2938 La Cresta Circle, Minden, Nevada 89423, dated July 25, 2007.**

**14.1**  
Comment: This letter is submitted to raise my concern about the subject discharge permit. While I am not fully conversant in technical aspects of waste water treatment technology, the course of action that the North Valley Waste Water Treatment Facility (NVWWTF) has taken to modify its plant appears to be rushed and lacking comprehensive planning.

Response: Your concerns are noted.

**14.2**  
Comment: (a) As I understand it the discharge plan is based on a series of assumptions which collectively serve as the underpinning for the NVWWTF long term master plan. (b) Basically, they plan to treat effluent to a secondary level and sell it to a private concern for irrigation purposes during the growing season. (c) During the winter months the effluent will be stored in a retention pond. The size of the pond has been supposedly reduced based on hope that Rapid Infiltration Basin(s) will provide enough filtration to discharge the balance of the effluent. On the surface this would all seem to be workable; however, a closer look brings forth a number of questions which would seem to challenge the efficacy of the proposed plan.

Response: (a) Your comment is noted. (b) See response to comment 2.1.a.  
(c) Your comments are noted.

**14.3**  
Comment: (a) NVWWTF has moved forward with this project without actually securing the required permits beforehand, which flies in the face of common sense. They have spent public money for design on the assumption that the permits will be granted in whole without any requirements for significant modification. If this proves to be a false assumption there doesn't appear to be a coherent back-up plan, which indicates the poor nature of the planning effort. (b) The fact that local residents are voicing objections is primarily due to lack of consideration displayed by the public officials towards to the very people they supposedly represent. Our perception is that they went through the motions of listening to our arguments then dismissed them out of hand.

This too calls to question the viability of a plan which has to be bulldozed through the objections of the supposed beneficiaries.

Response: (a) See response to comment 2.4. (b) Your comments are noted.

#### 14.4

Comment: NVWWTF has apparently entered into a contract with Bentley Agrowdynamics to use the effluent for irrigation purposes on Bentley land. There is also a provision in the contract that allows the County to continue farming the land with the effluent irrigation even if Bentley decides to discontinue its own farming activities. We could not find anything in the contract which speaks to the provisions for future disposal should the land be sold. That may be ignorance of the actual contractual language on our part. On the other hand, it could be that such provisions are not clearly spelled out; or they don't even exist. This is a question that we think needs to be asked before such a discharge permit is granted. What if such a provision is lacking? What is the county going to do with that effluent in such a case?

Response: Your comments are noted.

#### 14.5

Comment: (a) NVWWTF has proposed a pilot project to dispose of secondary effluent through the use of a Rapid Infiltration Basin. Evidently this is relegated to the status of a pilot project because there is uncertainty as to the sufficiency of the filtration provided by the RIB. (b) Our research indicates that the installation of a Dynasand unit would provide a level of tertiary treatment which would make the RIB a viable means of long term disposal. This is based on the levels of reduction to both phosphates and nitrates, which are obtainable with such equipment. This equipment is manufactured by the same company that NVWWTF is using as a basis for its long term headwork's improvement projects; and, the company literature on such equipment underlies the basis of our contention. The apparent reason for not pursuing this alternative is apparently cost; however, if the size of the proposed retention basin was reduced by half the savings would fund such extra equipment. No one has shown us to be incorrect in this assertion. This gives rise to yet another question. (c) If we are correct in our assertion, why on earth would the county choose a path which is plagued with the uncertainty discussed above? It would seem more prudent to go with an option that would appear to work at the outset, rather than one which is subject to an uncertain level of filtration. Isn't the very alternative we suggest one of the most likely methods of back-up should the RIB filtration not be sufficient to reduce the secondary effluent to acceptable levels?

Response: (a) See response to comment 2.1.a.; See response to comment 1.6. The RIB authorized by this permit is a single pilot RIB to physically test computer modeling performed by the NVWWTF. Computer modeling has demonstrated that subsurface flow from the NVWWTF is toward the river in a northwesterly direction, that phosphorous is bound in the soil prior to reaching the river and nitrogen will have no impact on the quality of the river water. If the pilot RIB shows that the computer modeling is in error, no further RIBs will be authorized and the pilot RIB will be decommissioned. (b) Your comments are noted. (c) It is beyond the authority of the Division to design the method of wastewater treatment and disposal used.

#### 14.6

Comment: (a) The NVWWTF will be destroying over 42 acres of high desert habitat in order to install the proposed retention pond at its present size. To our knowledge the above alternative can be done at roughly the same construction cost; but it would reduce the destruction of habitat by half as much. Why doesn't the preservation of habitat enter into the decision making process of granting a permit? (b) Why did the NVWWTF

not include such an alternative in its planning? (c) Is the cost of redesign more important than the character of the land?

Response: (a) See response to comment 3.1.c. (b) See response to comment 14.5.c. (c) Your comment is noted.

#### **14.7**

Comment: (a) The NVWWTF insists that they have moved at the present pace because further delay would put them in violation of current requirements. The fact is that Bentley won't be able to take a 1 MGD output from the NVWWTF facility until spring of 2008 or maybe even later. The Biolac Wave Oxidation rework to the first pond in the facility will happen this year; and it will provide an output of about 450,000 GPD. The rework of the next pond hasn't even been approved by the county; and since it's not in the 2007 budget it probably won't happen until mid 2008. Based on these facts, NVWWTF wouldn't be able to deliver 1 MGD until the mid 2008 timeframe. If a pond half of the present size was built within the proposed footprint it would provide about 5 months of storage capacity at a facility outflow of 450,000 GPD. This length of storage time is consistent with what the county already proposes. (b) If the tertiary treatment equipment were installed with the savings from the pond reduction, the RIB would be disposing effluent that is already down to acceptable levels; and the filtration questions would be mute. (c) The county proposed a 4 RIB solution in lieu of one of 2 retention ponds at 42 acres each. Each 42 acre pond would be able to store 5 months of effluent at 1MGD. So the math indicates that 2 RIB's should be sufficient to dispose 450,000 GPD of effluent. Under the County plan a second RIB would commissioned along with the conversion of the second pond to the Biolac Wave Oxidation system. In spring of 2008, Bentley would supposedly be able to receive 1MGD, which means in theory that they could dispose of the accumulated storage in the smaller pond plus an additional 450,000 GPD. The additional 350,000 GPD would flow to the 2 RIB's. (Note: Even though Bentley is capable of receiving 1MGD at this time, the 2 combined Biolac ponds can only process slightly over 900,000 GPD.) The redesign of a smaller pond and installation of the tertiary treatment facility is probably still doable in the same timeframe as the present plan. In all likelihood the second pond won't be converted in time to provide the additional output to Bentley until late in the growing season; so the perceived effects of additional delay would seem to be insignificant. Why does the NVWWTF insist on pursuing a plan that has more apparent risk then the alternative discussed above?

Response: Your comments are noted. See response to comment 14.5.c. (b) See response to comment 2.1.a. (c) Your comments are noted. See response to comment 14.5.c.

#### **14.8**

Comment: As I understand the permit review and hearing process, the Department of Environment Protection is most interested in comments or questions which speak to the flaws in the applicants discharge plan. I have tried to show that there are serious questions regarding the assumptions on which the discharge plan is based. To me the above assumptions have weaknesses which threaten the underpinnings of the NVWWTF discharge plan. So much so, that the plan can be likened to a row of dominoes which will fall in sequence if any of the assumptions does not work. At the very least I would hope that the NDEP gets fact based answers to the questions I have asked in this letter. In the end I may be proven wrong; but the bigger question is "What if I'm right?"

Response: Your comments are noted.

**Comments from Public Hearing – August 1, 2007 – 1:30 P.M. to 2:30 P.M.**

**Comments from Steve Bennett, 2906 La Cresta Circle, Minden, Nevada 89423**

Mr. Bennett asked for a breakdown of funding for the NVWWTF project. His query was answered by Carl Ruschmeyer.

Mr. Bennett read letter (with some paraphrasing) dated July 25, 2007. See comments and responses 1.1 through 1.17.

**Comments from John Nolte, 2930 La Cresta Circle, Minden, Nevada 89423**

Comment: What is the correct size of the effluent pond.

Response: 39.7 acres.

**Comments from John Haug, 2919 La Cresta Circle, Minden, Nevada 89423**

Comment: How can you consider this permit [NEV60025] without considering the Bently permit [NEV2002505].

Response: Each is a stand alone permit. The Douglas County permit will not be given final approval unless the Bently permit proceeds and is allowed to irrigate the 250 acres with effluent. {Clarification of response: NVWWTF will not be given final approval to use the treatment facility at modification flow, i.e., 1.0 MGD unless the Bently permit is issued with authorization to use NVWWTF treated effluent.}

Comment: They'll be allowed to construct and tear up the countryside without the Bently permit?

Response: Comment noted.

Comment: Who would be regulating Bently, the County or the State?

Response: The State would review the submitted application and supporting documentation issue a separate permit to Bently. Effluent would be applied agronomically base on acreage. Permit would have the same language concerning odor and mosquito control.

Comment: The County should be looking at tertiary level treatment and the tertiary water should be discharged to the river.

Comment: I'd like to stand on the letter I did write which is part of the record.

Response: See comments and responses 4.1 through 4.5.

**Comments from Deborah Larson, 2928 La Cresta Circle, Minden, Nevada 89423**

Comment: The Bently Kirman Tract will become a breeding ground for mosquitoes due to standing water after irrigation. Will it be [standing] there long enough for them [mosquitoes] to breed.

Response: Flood irrigation [waters] percolate into the soil and won't be standing where it could go anaerobic and cause odors. Flood irrigation with effluent hasn't been a mosquito problem to date with the State.

**Comments from Curtis Smith, 2933 La Cresta Circle, Minden, Nevada 89423**

Comment: Permit should be denied.

Response: Comment noted.