#### **LCB File No. R062-98**

#### NOTICE OF INTENT TO ACT UPON REGULATIONS NEVADA STATE ENVIRONMENTAL COMMISSION NOTICE OF HEARING

The Nevada State Environmental Commission will hold a public hearing beginning at 9:00 a.m. on Wednesday, June 17, 1998, at the Clark County Education Center Board Room located at 2832 East Flamingo Road, Las Vegas, Nevada. The hearing location is at the Clark County Public Schools administrative offices between McLeod Street and Eastern Avenue.

The purpose of the hearing is to receive comments from all interested persons regarding the adoption, amendment, or repeal of regulations in Chapters 445A and 445B. If no person directly affected by the proposed action appears to request time to make an oral presentation, the State Environmental Commission may proceed immediately to act upon any written submission.

1. Petition 96005 (LCB R-062-98) is a proposed permanent amendment to NAC 445A.194 to NAC 445A.201 for revisions to the water quality standards for Las Vegas Wash, Las Vegas Bay and Lake Mead. The proposed revisions add explanation of requirements to maintain existing higher quality (RMHQ). It is proposed to remove all references to "90% of the samples" and replace the language with "95% of the samples" for RMHQs. The pH standard for Lake Mead water quality standards in NAC 445A.194 and 445A.195 is proposed to be revised and a standard for escherichia coli is added. NAC 445A.196 and 445A.197, the standards for the Las Vegas Bay, are proposed to be amended to add RMHQs for chlorophyll a at stations LM4 and LM5 and to revise the standard for pH and nitrite. NAC's 445A.198 through NAC 445A.201 are proposed to be amended to add a standard for total suspended solids, revise the standard for pH in the lower reach and revise the RMHQ for total dissolved solids.

The proposed changes to the water quality standards have no immediate economic effect on business. Those agencies which operate Las Vegas Valley's three sewage treatment facilities and other dischargers to the Las Vegas Wash may realize an economic impact in the long-term. It is not possible at this time to estimate future costs or if any will actually be realized. Future economic costs will be dependent upon growth within Clark county. The purposed changes to the water quality standards will have no immediate economic effect on the public. The public may see long-term costs associated with necessary actions for maintaining the proposed water quality standards. The proposed regulations do not overlap or duplicate any regulations of another state or local governmental agency. The regulations are no more stringent than federal regulations. There is no additional cost to the agency for enforcement. This regulation does not add a new fee, nor increase an existing fee.

**2. Petition 98006 (LCB R-063-98)** is a permanent amendment to NAC 445B that updates the Environmental Commissions Rules of Practice. The petition amends NAC 445B.890 (Request for Hearing) by updating the address and zip code of the Commission. Updates to the Rules of Practice are fulfilled in accordance to NRS 233B.050(d).

--1--Agency Draft of R062-98 There is no estimated adverse or beneficial economic effect upon business by this proposed regulation, either immediate or long term. There will be no immediate adverse or beneficial economic effect on the public. The proposed regulations do not overlap or duplicate any regulations of another state or local governmental agency. The regulations affect the Commission's Rules of Practice, therefore there is no commensurate federal law or regulation. The regulations are no more stringent than federal regulations. There is no additional cost to the agency for enforcement. This regulation does not add a new fee, nor increase an existing fee.

Persons wishing to comment upon the proposed regulations or any other matter listed above may appear at the scheduled public hearing or may address their comments, data, views or arguments, in written form, to the Environmental Commission, 333 West Nye Lane, Carson City, Nevada 89706-0851. Written submissions must be received at least 5 days before the scheduled public hearing.

A copy of the regulations to be adopted or amended will be on file at the State Library, 100 Stewart Street and the Division of Environmental Protection, 333 West Nye Lane - Room 104, in Carson City and at the Division of Environmental Protection, 555 E. Washington - Suite 4300, in Las Vegas for inspection by members of the public during business hours. In addition, copies of the regulations and public notice have been deposited at major library branches in each county in Nevada. The notice and the text of the proposed regulations are also available in the State of Nevada Register of Administrative Regulations which is prepared and published monthly by the Legislative Counsel Bureau pursuant to NRS 233B.0653. The proposed regulations are on the Internet at http://www.leg.state.nv.us.

Pursuant to NRS 233B.0603(c) the provisions of NRS 233B.064 (2) is hereby provided:

"Upon adoption of any regulation, the agency, if requested to do so by an interested person, either prior to adoption or within 30 days thereafter, shall issue a concise statement of the principal reasons for and against its adoption, and incorporation therein its reason for overruling the consideration urged against its adoption".

Additional copies of the regulations to be adopted or amended will be available at the Division of Environmental Protection for inspection and copying by the members of the public during business hours. Copies will also be mailed to members of the public upon request. A reasonable fee may be charged for copies if it is deemed necessary.

Members of the public who are disabled and require special accommodations or assistance at the meeting are requested to notify the Executive Secretary in writing, Nevada State Environmental Commission, 333 West Nye Lane, Room 128, Carson City, Nevada, 89706-0851, facsimile (702) 687-5856, or by calling (702) 687-4670 Extension 3118, no later than 5:00 p.m. on **June 11, 1998**.

This public notice has been posted at the following locations: Clark County Public Library, Clark County Education Center and Grant Sawyer Office Building in Las Vegas; the Washoe County Library in Reno; and at the Division of Environmental Protection and State Library in Carson City.

# PROPOSED PERMANENT REGULATION OF THE NEVADA STATE ENVIRONMENTAL COMMISSION

#### Petition 98005

Explanation: Matter in italics is new. Matter in [] is material to be omitted.

AUTHORITY: NRS 445A.425 and 445A.520

**Section 1.** NAC 445A.194 is hereby amended to read as follows:

**445A.194** Beneficial uses for area of Lake Mead not covered by NAC 445A.196. The water quality standards for the area of Lake Mead which is not covered by NAC 445A.197 are prescribed in NAC 445A.195. The beneficial uses for this area are:

- 1. Irrigation;
- 2. Watering of livestock;
- 3. Recreation involving contact with the water;
- 4. Recreation not involving contact with the water;
- 5. Industrial supply;
- 6. Municipal or domestic supply, or both;
- 7. Propagation of wildlife; and
- 8. Propagation of aquatic life, including a warmwater fishery.

Requirements to Maintain Existing Higher Quality (RMHQ) are established when existing water quality is higher than the beneficial use standards. For the area of Lake Mead as defined in NAC 445A.194, RMHQs have been established for temperature, pH, chlorophyll <u>a</u>, total dissolved solids, total inorganic nitrogen, turbidity and, color.

# Section 2. NAC 445A.195 is hereby amended to read as follows: 445A.195 Lake Mead excluding area covered by NAC 445A.197.

### WATER QUALITY STANDARDS $[^j]^{\ i}$

#### Lake Mead

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARD FOR BENEFICIAL USES	BENEFICIAL USES AS DESIGNATED IN NAC 445A.194 Most Stringent Use Listed First
Temperature [°C_T] Single Value[a]	_T 0 °C a	_T 2 °C a	[Warmwater Fishery <sup>b</sup> ] 8
pH [- Standard Units] Single Value	95% of samples not to exceed 8.8 <i>SU</i>	Within Range [7.0] 6.5 - 9.0 SU	[Bathing and water contact sports <sup>b</sup> , wildlife propagation <sup>b</sup> , warmwater fishery, aquatic life, drinking water supply, industrial supply, agricultural use] 8, 3, 7, 6, 5, 1, 2
Dissolved Oxygen[-mg/l] Single Value [in 90% of Samples]		≥5 mg/l in the epilimnion or [≥5 mg/l] average in water column during periods of nonstratification	[Warmwater fishery <sup>b</sup> , aquatic life, stock watering, bathing & contact sports, noncontact sports & esthetics, drinking water supply, wildlife propagation.] 8, 2, 3, 4, 6, 7
Chlorophyll <u>a</u> - μg/l	[c,k] <i>b</i>		[Bathing and water contact sports <sup>b</sup> , warmwater fishery <sup>b</sup> , aquatic life <sup>b</sup> , noncontact sports & esthetics <sup>b</sup> , drinking water supply <sup>b</sup> .] 3, 8, 4, 6
Un-ionized Ammonia - mg/l		[d] c	[Warmwater fishery <sup>b</sup> , aquatic life.] 8
Total Dissolved Solids [- mg/l] [Flow weighted Annual Average] Single Value	Flow Weighted  Annual Average  ≤723 mg/l measured below Hoover Dam [h] d	 ≤1000 mg/l	[Drinking water supply <sup>b</sup> , agricultural use.] 6, 1
Chloride [- mg/l] Single Value	e	≤400 <b>mg/l</b> °	[Drinking water supply <sup>b</sup> , stock watering, wildlife propagation.] 6, 2, 7
Sulfate [- mg/l] Single Value	e	≤500 <i>mg/l</i> °	[Drinking water supply <sup>b</sup> .] 6
Suspended Solids [- mg/l] Single Value		≤25 <b>mg/l</b>	[Warmwater fishery <sup>b</sup> , aquatic life, esthetics.] <i>8</i> , <i>4</i>
Nitrogen Species as N [- mg/l] Single Value [in 90% of Samples]	Total Inorganic Nitrogen  95% of samples  ≤4.5 mg/l	Nitrate $\leq 10  mg/l$ Nitrite $\leq 1  mg/l$	[Drinking water supply <sup>b</sup> , stock watering, warmwater fishery, aquatic life, wildlife propagation.] 6, 2, 8, 7
Turbidity [- NTU] Single Value	f	≤25 <i>NTU</i>	[Warmwater fishery <sup>b</sup> , aquatic life, drinking water supply, esthetics, bathing & water contact sports.] <i>8</i> , <i>6</i> , <i>3</i> , <i>4</i>
Fecal Coliform [MF/100 ml]		≤200/400 g MF or MPN/100ml	[Bathing & water contact sports <sup>b</sup> , agricultural use, noncontact sports & esthetics, drinking water supply, wildlife propagation.] <i>3, 1, 4, 6, 7, 2</i>

--4--Agency Draft of R062-98

E. Coli	30-day Log Mean Single Value	 	≤126 MF/100ml ≤235 MF/100ml	3, 4, 6, 1, 2
Color-Pt-C Single Va		[i] <i>h</i>		[Esthetics <sup>b</sup> , drinking water supply <sup>b</sup> ] 4, 6

<sup>&</sup>lt;sup>a</sup> Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.

#### [b The most significant beneficial uses.]

[S] b Not more than one monthly mean in a calendar year at Station 3 may exceed  $45\mu g/l$ . The mean for chlorophyll  $\underline{a}$  in summer (July I - September 30) must not exceed 40  $\mu g/l$  at Station 3, and the mean for 4 consecutive summer years must not exceed 30  $\mu g/l$ . ["Mean" indicates the average of not less than 2 samples per month. The samples must consist of the average of the data collected from not less than 3 sites within a cross section of Station 3 that are representative of the top 5 meters of the cross section.] The sample will be collected from the center of the channel and will be representative of the top 5 meters. "Station 3" means the center of the channel at which depth is from 16 to 18 meters.

The mean chlorophyll  $\underline{a}$  in the growing season (April 1-September 30) must not exceed  $16.0\mu g/l$  at LM4 and  $9.0\mu g/l$  at LM5. LM4 is located just outside of the Las Vegas Bay launch ramp and marina, next to buoy RW 12 a. LM5 is located next to buoy RW 12 a with the southshore landmark of Cresent Island.

The mean chlorophyll  $\underline{a}$  in the growing season (April 1 - September 30) must not exceed  $5\mu g/l$  in the open water of Boulder Basin, Virgin Basin, Gregg Basin and Pierce Basin. The single value must not exceed  $10\mu g/l$  for more than 5% of the samples.

For all of the above, during months when only one sample is available, that value will be used in place of the monthly mean.

[d] <sup>c</sup> See footnote [c] **b** to NAC 445A.197.

- <sup>d</sup> The details of this standard are specified in the "1996 Review Water Quality Standards for Salinity, Colorado River System" approved by the State Environmental Commission on March 25, 1998.
- <sup>e</sup> The combination of this constituent with other constituents comprising TDS must not result in the violation of the TDS standards for Lake Mead and the Colorado River.
- f Turbidity must not exceed that characteristic of natural conditions by more than 10 Nephelometric Units.
- <sup>g</sup> Based on a minimum of not less than five samples taken over a 30-day period, the fecal coliform bacterial level must not exceed a log mean of 200 per 100 ml. nor must more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- [h The details of this standard are specified in the "1981 Review Water Quality Standards for Salinity, Colorado River System," approved by the state environmental commission on June 8, 1982.
- <sup>1</sup> Color must not exceed that characteristic of natural conditions by more than 10 units Platinum-Cobalt Scale.
- [i] The Commission recognizes that at entrances of tributaries to this reach, localized violations of standards may occur.

[\* The mean for chlorophyll  $\underline{a}$  in the growing season (April-September) must not exceed 5  $\mu$ gl in the open water of Boulder Basin, Virgin Basin, Gregg Basin and Pierce Basin. The single value must not exceed 10  $\mu$ g/l for more than 10 percent of the samples. "Mean" indicates the average of not less than 2 samples per month.]

[The "Guidelines for Formulating Water Quality Standards for the Interstate Waters of the Colorado River System," adopted January 13, 1967, are incorporated as a supplement to the standards for this stream.]

**Section 3.** NAC 445A.196 is hereby amended to read as follows:

445A.196 Beneficial uses for Lake Mead from western boundary of Las Vegas [Marina] Bay Campground to confluence of Las Vegas Wash. The water quality standards for Lake Mead from the western boundary of the Las Vegas [Marina] Bay Campground to the confluence of the Las Vegas Wash are prescribed in NAC 445A.197. The beneficial uses for this area are:

- 1. Irrigation;
- 2. Watering of livestock;
- 3. Recreation not involving contact with water;
- 4. Industrial supply;
- 5. Propagation of wildlife; and
- 6. Propagation of aquatic life, including a warmwater fishery.

It is the goal that all of Lake Mead will be fishable and swimmable.

Requirements to Maintain Existing Higher Quality (RMHQ) are established when existing water quality is higher than the beneficial use standards. For Lake Mead as defined in NAC 445A.196, RMHQs have been established for pH, total inorganic nitrogen, total dissolved solids and, turbidity.

**Section 4.** NAC 445A.197 is hereby amended to read as follows:

445A.197 Lake Mead from the western boundary of Las Vegas [Marina] Bay Campground to the confluence of Las Vegas Wash. Control point at the Western Boundary of Las Vegas [Marina] Bay Campground.

#### WATER QUALITY STANDARDS<sup>f</sup>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARD FOR BENEFICIAL USES	BENEFICIAL USES AS DESIGNATED IN NAC 445A.196 Most Stringent Use Listed First
Temperature [°C _T] Single Value[*]	_ <b>T</b> 0 <b>°C</b> "	_T 2 °C a	[Warmwater fishery <sup>b</sup> ] 6
pH [- Standard Unit] Single Value	95% of samples not to exceed 8.9 SU	Within Range [7.0] 6.5 - 9.0 SU	[Wildlife propagation <sup>b</sup> , agricultural use, warmwater fishery, aquatic life, industrial supply.] 6, 5, 1, 4, 2
Dissolved Oxygen [-mg/l] Single Value [in 90% of Samples]	+	≥5 mg/l	[Warmwater fishery <sup>b</sup> , aquatic life, stock watering, noncontact sports & esthetics, wildlife propagation.] <i>6</i> , <i>2</i> , <i>3</i> , <i>5</i>
Nitrogen Species as N [-mg/l] Single Value [in 90% of samples]  [Single Value]	Total Inorganic Nitrogen  95% of samples  ≤5.3 mg/l	Nitrate ≤90 <i>mg/l</i> Nitrite ≤[10] 5 <i>mg/l</i>	[Warmwater fishery <sup>b</sup> , stock watering, wildlife propagation.] 6, 2, 5  [Stock watering <sup>b</sup> , wildlife propagation <sup>b</sup> ] 6, 2, 5
Un-ionized Ammonia as N -mg/l		[c] <i>b</i>	[Warmwater fishery <sup>b</sup> , aquatic life <sup>b</sup> .] 6
Total Dissolved Solids [- mg/l] Single Value	[e] <i>c</i>	≤3000 <b>mg/l</b>	[Stock watering <sup>b</sup> , irrigation.] 2, 1
Suspended Solids [- mg/l] Single Value		≤25 <i>mg/l</i>	[Warmwater fishery <sup>b</sup> , aquatic life, esthetics] 6, 3
Turbidity [- NTU] Single Value	d	≤25 <i>NTU</i>	[Warmwater fishery <sup>b</sup> , aquatic life, esthetics.] 6, 3
Fecal Coliform MF <i>or MPN</i> /100ml Single Value		[g] e	[Agricultural use <sup>b</sup> , wildlife propagation <sup>b</sup> , noncontact sports & esthetics] 5, 3, 1, 2

<sup>&</sup>lt;sup>a</sup> Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.

[b The most significant beneficial uses.]

[S] The 4-day average for the concentration of un-ionized ammonia must not exceed 0.05 mg/l more often than once every 3 years. The daily value for this average must [consist of the average of the data collected from not less than 3 sites within a cross section of Station 2 that are representative of the top 2.5 meters of the cross section, and must] account for diurnal fluctuation. Data will be collected at Station 2 from surface to total depth at not greater than 2 meter intervals. This [average] standard is not applicable to the area between Station 2 and the confluence of the Las Vegas Wash. The single value must not exceed 0.45 mg/l more often than once every 3 years. [When the temperature exceeds 20°C, these standards must be adjusted pursuant to methods accepted by the United States Environmental Protection Agency.] "Station 2" means the center of the channel at which the depth is 10 meters.

<sup>c</sup> Any increase in Total Dissolved Solids must not result in a violation of the standards specified in "1996 Review--Water Quality Standards for Salinity, Colorado River System" approved by the State Environmental Commission on March 25, 1998.

[e Any increase in Total Dissolved Solids must not result in a violation of the standards specified in "1981 Review--Water Quality Standards for Salinity, Colorado River System" approved by the state environmental commission on June 8, 1982.]

[f The Commission recognizes that because of discharges of tributaries that localized violations of standards may occur in this reach.]

[8] Any discharge from a point source into Las Vegas Wash must not exceed a log mean of 200 per 100 ml. based on a minimum of not less than five samples taken over a 30-day period nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

f The Commission recognizes that because of discharges of tributaries that localized violations of standards may occur in this reach.

[The "Guidelines for Formulating Water Quality Standards for the Interstate Waters of the Colorado River System," adopted January 13, 1967, are incorporated as a supplement to the standards for this stream. The guidelines may be obtained from the division of environmental protection at no cost.]

**Section 5.** NAC 445A.198 is hereby amended to read as follows:

445A.198 Beneficial uses for Las Vegas Wash from [Pabco] Telephone Line Road to City of Las Vegas and Clark County [sewage] wastewater treatment plants. The water quality standards for the Las Vegas Wash from [Pabco] Telephone Line Road to the confluence of the discharges from the City of Las Vegas and Clark County [sewage] wastewater treatment plants including the City of Henderson wastewater treatment plant discharge are prescribed in NAC 445A.199. The beneficial uses are:

- 1. Irrigation;
- 2. Watering of livestock;
- 3. Recreation not involving contact with water;
- 4. Maintenance of a freshwater marsh;
- 5. Propagation of wildlife; and
- 6. Propagation of aquatic life, excluding fish. This does not preclude the establishment of a fishery.

<sup>&</sup>lt;sup>d</sup> Turbidity must not exceed that characteristic of natural conditions by more than 10 Nephelometric Units.

Requirements to Maintain Existing Higher Quality (RMHQ) are established when existing water quality is higher than the beneficial use standards. For Las Vegas Wash as defined in NAC 445A.198, RMHQs have been established for temperature, pH, total inorganic nitrogen and, total dissolved solids.

**Section 6.** NAC 445A.199 is hereby amended to read as follows:

445A.199 Las Vegas Wash from [Pabco] Telephone Line Road to City of Las Vegas and Clark County [sewage] wastewater treatment plants. Control point at [Pabco] Telephone Line Road. The limits in this table apply from [Pabco] Telephone Line Road to the confluence of the discharges from the City of Las Vegas and Clark County [sewage] wastewater treatment plants including the City of Henderson wastewater treatment plant discharge.

### WATER QUALITY STANDARDS Las Vegas Wash

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARD FOR BENEFICIAL USES	BENEFICIAL USES AS DESIGNATED IN NAC 445A.198 Most Stringent Use Listed First
Temperature [°C _T] Single Value[a]	_T0 °C a		
pH - [Standard Unit] Single Value [of 90% of samples]	<b>95% of samples</b> Within Range 6.5 - 7.8 <b>SU</b>	Within Range 6.5 - 9.0 <i>SU</i>	[Wildlife propagation <sup>d</sup> , agricultural uses <sup>d</sup> ] 6, 5, 1, 2
Dissolved Oxygen-mg/l		b	[Stock watering <sup>d</sup> , noncontact sports, & esthetics <sup>d</sup> , wildlife propagation] 6, 2, 3, 5
Nitrogen Species as N[-mg/l] Single Value [in 90% of samples]	Total Inorganic Nitrogen  95% of samples  ≤20 mg/l	Nitrate Nitrite ≤100 mg/l ≤10 mg/l	[Stock water <sup>d</sup> , wildlife propagation <sup>d</sup> ·] 2, 5
Total Suspended Solids		≤135 mg/l °	6
Total [Filterable Residue]  Dissolved Solids at 180°C[-mg/l]  Single Value [in 90% of samples]	95% of samples ≤[2300] 1900 mg/l	≤3000 <i>mg/l</i>	[Stock water <sup>d</sup> , irrigation, freshwater marsh maintenance.] 2, 1, 4
Fecal Coliform MF <i>or MPN</i> /100 ml		[c] <i>d</i>	[Noncontact sports <sup>d</sup> , esthetics <sup>d</sup> , wildlife propagation, agricultural use] 3, 5, 1, 2

<sup>&</sup>lt;sup>a</sup> Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone except during storm flow conditions.

--9--Agency Draft of R062-98

- [It is known that a] Aerobic conditions are desirable for the beneficial uses of propagation of aquatic life, excluding fish, [stock] watering of livestock, [noncontact sports and esthetics] recreation not involving contact with the water, and [wildlife] propagation of wildlife. [Existing conditions prevent the attainment of aerobic conditions as of September 9, 1982. Therefore] So as not to prevent the development and restoration of marshes and wetlands in the Wash, aerobic conditions are established as a goal rather than a standard and the goal is not intended to preclude development of a limited fishery in selected areas. Aerobic conditions [is] are intended to mean the absence of objectionable odors that may be caused by wastewater discharges in excess of existing odors.
- <sup>c</sup> Total Suspended Solids Standard does not apply when flows are greater than 110% of average flow as measured at the nearest gage. Average flow is defined as the twelve month rolling average of the average monthly flow.
- [9] d Any discharge from a point source into Las Vegas Wash must not exceed a log mean of 200 per 100 ml. based on a minimum of not less than five samples taken over a 30-day period nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

[d The most significant beneficial uses.]

Section 7. NAC 445A.200 is hereby amended to read as follows:

445A.200 Beneficial uses for Las Vegas Wash from [Pabco Road to] Lake Mead to Telephone Line Road. The water quality standards for the Las Vegas Wash from [Pabco Line Road to] the confluence of Las Vegas Wash with Lake Mead to Telephone Line Road are prescribed in NAC 445A.201. The beneficial uses for this area are:

- 1. Irrigation;
- 2. Watering of livestock;
- 3. Recreation not involving contact with the water;
- 4. Maintenance of a freshwater marsh;
- 5. Propagation of wildlife; and
- 6. Propagation of aquatic life, excluding fish. This does not preclude the establishment of a fishery.

Requirements to Maintain Existing Higher Quality (RMHQ) are established when existing water quality is higher than the beneficial use standards. For Las Vegas Wash as defined in NAC 445A.200, RMHQs have been established for temperature, pH, total inorganic nitrogen and, total dissolved solids.

Section 8. NAC 445A.201 is hereby amended to read as follows: 445A.201 Las Vegas Wash. The limits in this table apply from [Pabco Road to] the confluence of the Las Vegas Wash with Lake Mead to Telephone Line Road.

#### WATER QUALITY STANDARDS

Las Vegas Wash

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES AS DESIGNATED IN NAC 445A.200 Most Stringent Use Listed First
Temperature [°C _T] Single Value[a]	_T 0 °C"		
pH [- Standard Unit] Single Value [of 90% of samples]	95% of samples Within Range 7.2 - 8.7 SU	Within Range [7.0] 6.5 - 9.0 SU	[Wildlife propagation <sup>d</sup> , agricultural uses <sup>d</sup> ] 6, 5, 1, 2
Dissolved Oxygen-mg/l		b	[Stock watering <sup>d</sup> , noncontact sports, & esthetics <sup>d</sup> , wildlife propagation <sup>d</sup> ] 6, 2, 3, 5
Nitrogen Species as N[-mg/l] Single Value [in 90% of samples]	Total Inorganic Nitrogen  95% of samples  ≤17 mg/l	Nitrate Nitrite ≤100 <i>mg/l</i> ≤10 <i>mg/l</i>	[Stock watering <sup>d</sup> , wildlife propagation <sup>d</sup> ] 2, 5
Total Suspended Solids		≤ 135 mg/l °	6
Total [Filterable Residue]  Dissolved Solids at  180°C[-mg/l]  Single Value [in 90% of samples]	95% of samples ≤[2600] 2400 mg/l	≤3000 <i>mg/l</i>	[Stock water <sup>4</sup> , irrigation, freshwater marsh maintenance.] 2, 1, 4
Fecal Coliform MF <i>or MPN</i> /100 ml		[c] <i>d</i>	[Noncontact sports & esthetics <sup>d</sup> , wildlife propagation <sup>d</sup> , agricultural use] 3, 5, 1, 2

<sup>&</sup>lt;sup>a</sup> Maximum allowable increase in temperature above receiving water temperature at the boundary of an approved mixing zone.

b [It is known that a]Aerobic conditions are desirable for the beneficial uses of propagation of aquatic life, excluding fish, [stock] watering of livestock, [noncontact sports and esthetics] recreation not involving contact with the water, and [wildlife] propagation of wildlife. [Existing conditions prevent the attainment of aerobic conditions as of September 9, 1982. Therefore] So as not to prevent the development and restoration of marshes and wetlands in the Wash, aerobic conditions are established as a goal rather than a standard and the goal is not intended to preclude development of a limited fishery in selected areas. Aerobic conditions [is] are intended to mean the absence of objectionable odors that may be caused by wastewater discharges in excess of existing odors.

<sup>&</sup>lt;sup>c</sup> Total Suspended Solids Standard does not apply when flows are greater than 110% of average flow as measured at the nearest gage. Average flow is defined as the twelve month rolling average of the average monthly flow.

[9] <sup>d</sup> Any discharge from a point source into Las Vegas Wash must not exceed a log mean of 200 per 100 ml. based on a minimum of not less than five samples taken over a 30-day period nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

[d The most significant beneficial uses.]

**END OF PETITION 98005**