

FACT SHEET

The United States Environmental Protection Agency (EPA)
Plans To Reissue A
National Pollutant Discharge Elimination System (NPDES) Permit To:

The City of Gooding
308 5th Avenue West
Gooding, Idaho 83330

Permit Number: ID-002002-8
Public Notice start date: January 6, 2000
Public Notice expiration date: February 7, 2000

EPA Proposes NPDES Permit Reissuance.

EPA proposes to reissue an NPDES permit to the City of Gooding. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to the Little Wood River. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures
- a description of the current discharge and current sewage sludge (biosolids) practices
- a listing of proposed effluent limitations, schedules of compliance, and other conditions
- a map and description of the discharge location
- detailed technical material supporting the conditions in the permit

The State of Idaho Proposes Certification.

EPA is requesting that the Idaho Division of Environmental Quality certify the NPDES permit for the City of Gooding, under section 401 of the Clean Water Act. The state provided preliminary comments on the draft permit, and these comments have been incorporated into the draft permit.

Public Comment.

Persons wishing to comment on or request a Public Hearing for the draft permit may do so in writing by the expiration date of the Public Notice. A request for a Public Hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All comments and requests for Public Hearings must be in writing and should be submitted to EPA as described in the Public Comments Section of the attached Public Notice.

After the Public Notice expires, and all comments have been considered, EPA's regional Director for the Office of Water will make a final decision regarding permit reissuance.

Persons wishing to comment on State Certification should submit written comments by the Public Notice expiration date to the Idaho Division of Environmental Quality (IDEQ) at 601 Pole Line Road, Suite 2, Twin Falls, Idaho 83301. A copy of the comments should also be submitted to EPA.

If no substantive comments are received, the tentative conditions in the draft permit will become final, and the permit will become effective upon issuance. If comments are received, EPA will address the comments and issue the permit. The permit will become effective 30 days after the issuance date, unless a request for an evidentiary hearing is submitted within 30 days.

Documents are Available for Review.

The draft NPDES permit and related documents can be reviewed or obtained by visiting or contacting EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday (See address below). Draft permits, Fact Sheets, and other information can also be found by visiting the Region 10 website at “ www.epa.gov/r10earth/water.htm.

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, OW-130
Seattle, Washington 98101
(206) 553-2108 or
1-800-424-4372 (within Alaska, Idaho, Oregon and Washington)

The Fact Sheet and draft permit are also available at:

EPA Idaho Operations Office
1435 North Orchard Street
Boise, Idaho 83706
(208) 378-5746

TABLE OF CONTENTS

I.	APPLICANT	4
II.	FACILITY ACTIVITY	4
	A. Treatment Plant Description	4
	B. Background Information	4
III.	RECEIVING WATER	5
	A. Outfall Location/Receiving Water	5
	B. Water Quality Standards	5
	C. Water Quality Limited Segment	6
IV.	EFFLUENT LIMITATIONS	6
V.	SLUDGE REQUIREMENTS	7
VI.	MONITORING REQUIREMENTS	8
VII.	OTHER PERMIT CONDITIONS	9
	A. Quality Assurance Plan	9
	B. Additional Permit Provisions	9
VIII.	OTHER LEGAL REQUIREMENTS	10
	A. Endangered Species Act	10
	B. State Certification	10
	C. Permit Expiration	10

APPENDIX A - Wastewater Treatment Plant Location

APPENDIX B - Water Quality Standards

APPENDIX C - Basis for Effluent Limitations

APPENDIX D - Endangered Species Act

I. APPLICANT

City of Gooding
NPDES Permit No.: ID-002002-8

Facility Mailing Address:
308 5th Avenue West
Gooding, Idaho 83330

II. FACILITY INFORMATION

A. Treatment Plant Description

The City of Gooding owns, operates, and has maintenance responsibility for a facility which treats domestic sewage from local residents and commercial establishments. The facility's application indicates that the design flow of the facility is 1.0 million gallons per day (mgd), from 1995 through 1999 the facility's average monthly discharge has been between 0.18 mgd and 0.32 mgd. Treatment of wastewater consists of grit removal, influent screening, biological treatment through oxidation ditch, clarification, and chlorination/dechlorination. Sludge is treated biologically and land applied. Effluent may be discharged to the Little Wood River year round, however, during the summer months the discharge is land applied.

B. Background Information

The NPDES permit for the wastewater treatment plant expired on October 30, 1995. Under federal law, specifically, the Administrative Procedures Act (APA), a federally issued NPDES permit is administratively extended (i.e., continues in force and effect) provided that the permittee submits a timely and complete application for a new permit prior to the expiration of the current permit. Since the City did submit a timely application for a new permit, the current permit was administratively extended.

A review of the facility's Discharge Monitoring Reports¹ for the past five years indicates that the facility has generally been in compliance with its permit effluent limits.

A map has been included in Appendix A which shows the location of the treatment plant and the discharge location.

¹Discharge monitoring reports are forms that the facility uses to report the results of monitoring the facility has done in compliance with their NPDES permit.

III. RECEIVING WATER

A. Outfall location/ Receiving Water

The treated effluent from the City of Gooding wastewater treatment facility is discharged from outfall 001, located at latitude 42E 56' 34" and longitude 114E 44' 25", to the Little Wood River at approximately river mile 3.6.

Flow information was not available to determine the 1Q10² or the 7Q10³ flows. During the development of the previous permit, the Watermaster for Water District No. 37 and 37M indicated that throughout much of the year, water in the Little Wood River is diverted upstream of the Gooding discharge. This information also indicates that the amount of water allowed to pass through the Little Wood river past the City of Gooding can be as low as three (3) cubic feet per second (cfs). Therefore, this flow will be used to determine if water quality based effluent limitations are required for this discharge.

B. Water Quality Standards

A State's water quality standards are composed of use classifications, numeric and/or narrative water quality criteria, and an anti-degradation policy. The use classification system designates the beneficial uses (such as cold water biota, contact recreation, etc.) that each water body is expected to achieve. The numeric and/or narrative water quality criteria are the criteria deemed necessary, by the State, to support the beneficial use classification of each water body. The anti-degradation policy represents a three tiered approach to maintain and protect various levels of water quality and uses.

The Idaho *Water Quality Standards and Wastewater Treatment Requirements* (IDAPA 16.01.02.101.01.) protect the Little Wood River for the following beneficial use classifications: cold water biota, primary and secondary contact recreation, and agricultural water.

The criteria that the State of Idaho has deemed necessary to protect the beneficial uses for the Little Wood River, and the State's anti-degradation policy are summarized in Appendix B.

² The 1Q10 represents the lowest daily flow that is expected to occur once in ten years.

³ The 7Q10 represents the lowest 7 day average flow that is expected to occur once in ten years.

C. Water Quality Limited Segment

A water quality limited segment is any waterbody, or definable portion of water body, where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards. The Little Wood River has been listed as a water quality limited segment. This section of the river has been listed as water quality limited for nutrients, sediment, dissolved oxygen, flow alteration and pathogens.

Section 303(d) of the Clean Water Act (CWA) requires States to develop a Total Maximum Daily Load (TMDL) management plan for water bodies determined to be water quality limited. A TMDL documents the amount of a pollutant a waterbody can assimilate without violating a state's water quality standards and allocates that load to known point sources and nonpoint sources. The Idaho Division of Environmental Quality (IDEQ) is scheduled to complete a TMDL for the Little Wood River by the year 2003.

IV. EFFLUENT LIMITATIONS

In general, the Clean Water Act requires that the effluent limits for a particular pollutant be the more stringent of either technology-based effluent limits or water quality-based limits. A technology based effluent limit requires a minimum level of treatment for municipal point sources based on currently available treatment technologies. A water quality based effluent limit is designed to ensure that the water quality standards of a waterbody are being met. For more information on deriving technology-based effluent limits and water quality-based effluent limits see Appendix C. The following summarizes the proposed effluent limitations that are in the draft permit.

1. The pH range shall be between 6.5 - 9.0 standard units.
2. Removal Requirements for BOD₅ and TSS: For any month, the monthly average effluent concentration shall not exceed 15 percent of the monthly average influent concentration.
3. There shall be no discharge of floating solids or visible foam other than trace amounts.
4. Table 1, below, presents the proposed effluent limits for BOD₅, TSS, fecal coliform bacteria, chlorine, and ammonia.

TABLE 1: Monthly, Weekly and Daily Effluent Limitations

Parameters	Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit
BOD ₅	30 mg/L (150 lbs/day)	45 mg/L (225 lbs/day)	---
TSS	30 mg/L (150 lbs/day)	45 mg/L (225 lbs/day)	---
Fecal Coliform Bacteria May 1-September 30	50 colonies/100 ml	100 colonies/100 ml	500 colonies/100 ml
Fecal Coliform Bacteria October 1-April 30	100 colonies/100 ml	200 colonies/100 ml	800 colonies/100 ml
Total Residual Chlorine	13.0 µg/L (0.1 lbs/day)	---	22.0 µg/L (0.2 lbs/day)
Total Ammonia	0.5 mg/L (4.2 lbs/day)	---	1.3 mg/L (10.8 lbs/day)

V. SLUDGE REQUIREMENTS

The biosolids conditions in the administratively extended permit were based on best professional judgment since EPA had not promulgated biosolids regulations at the time of permit issuance. Since that time EPA has promulgated regulations for the use and disposal of biosolids. Therefore, the biosolids requirements contained in the administratively extended permit have not been incorporated into the proposed permit.

The biosolids management regulations at 40 CFR §503 were designed so that the standards are directly enforceable against most users or disposers of biosolids, whether or not they obtain an NPDES permit. Therefore, the publication of Part 503 in the *Federal Register* on February 19, 1993 served as notice to the regulated community of its duty to comply with the requirements of the rule, except those requirements that indicate that the permitting authority shall specify what has to be done.

Requirements are included in Part 503 for pollutants in biosolids, the reduction of pathogens in biosolids, the reduction of the characteristics in biosolids that attract vectors, the quality of the exit gas from a biosolids incinerator stack, the quality of biosolids that is placed in a municipal solid waste landfill (MSWLF) unit, the sites where biosolids is either land applied or placed for final disposal, and for a biosolids incinerator.

Even though Part 503 is self-implementing, Section 405(f) of the CWA requires the inclusion of biosolids use or disposal requirements in any NPDES permit issued to a Treatment Works Treating Domestic Sewage (TWTDS). In addition, the biosolids

permitting regulations in 40 CFR §122 and §124 have been revised to expand its authority to issue NPDES permits with these requirements. This includes all biosolids generators, biosolids treaters and blenders, surface disposal sites and biosolids incinerators. In the future, EPA Region 10 will be issuing a separate NPDES general permit which deals only with the use and disposal of biosolids. Facilities that generate biosolids, including the City of Gooding, will be required to be covered under the biosolids general permit. As mentioned earlier, even though the permittee does not presently have a permit for biosolids use or disposal, the Permittee is responsible for complying with the requirements of 40 CFR 503.

Presently, the permittee produces and distributes biosolids for land application. Biosolids are applied as a soil amendment product. The permittee has submitted a biosolids application to EPA, and is in the process of updating the application to include the following disposal options: transfer of biosolids to other facilities, accept biosolids from other facilities, send biosolids to a municipal solid waste landfill. The draft permit requires the permittee to submit its updated sludge application within one year of the effective date of the permit.

VI. MONITORING REQUIREMENTS

Section 308 of the Clean Water Act and federal regulation 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality. The Permittee is responsible for conducting the monitoring and for reporting results on Discharge Monitoring Reports to EPA.

In a letter dated December 27, 1999, the Idaho Division of Environmental Quality recommended that monitoring for nitrate-nitrite, total kjeldahl nitrogen, and total phosphorus be included in the draft permit to support the development of the TMDL for the Little Wood River. Monitoring for these parameters have been included in the draft permit.

Table 2 presents the proposed effluent monitoring requirements. Effluent monitoring for Outfall 001 is required only when the facility is actually discharging to the Little Wood River.

TABLE 2: City of Gooding Waste Water Treatment Plant Monitoring Requirements

Parameter	Sample Location	Sample Frequency	Sample Type
Flow, mgd	Effluent	Continuous	---
BOD ₅ , mg/L	Influent and effluent	1/week	24-hour composite
TSS, mg/L	Influent and effluent	1/week	24-hour composite
pH, standard units	Effluent	3/week	grab
Fecal Coliform Bacteria, colonies/100 ml	Effluent	1/week	grab
Total Residual Chlorine	Effluent	5/week	grab
Total Ammonia as N, mg/L	Effluent	1/week	24-hour composite
Nitrate-Nitrite, mg/L	Effluent	1/week	24-hour composite
Total Kjeldahl Nitrogen, mg/L	Effluent	1/week	24-hour composite
Total Phosphorus	Effluent	1/week	24-hour composite
Dissolved Oxygen, mg/L	Effluent	1/month	grab

VII. OTHER PERMIT CONDITIONS

A. Quality Assurance Plan

The federal regulation at 40 CFR 122.41(e) requires the Permittee to develop and submit a Quality Assurance Plan to ensure that the monitoring data submitted is accurate and to explain data anomalies if they occur. The Permittee is required to complete a Quality Assurance Plan within 60 days of the effective date of the final permit. The Quality Assurance Plan shall consist of standard operating procedures the Permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting.

B. Additional Permit Provisions

Sections II, III, and IV of the draft permit contain standard regulatory language that must be included in all NPDES permits. Because they are regulations, they cannot be challenged in the context of an NPDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

VIII. OTHER LEGAL REQUIREMENTS

A. Endangered Species Act

The Endangered Species Act requires federal agencies to consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service if their actions could adversely affect any threatened or endangered species. EPA has determined that issuance of this permit will not affect any of the endangered species in the vicinity of the discharge. See Appendix D for further details.

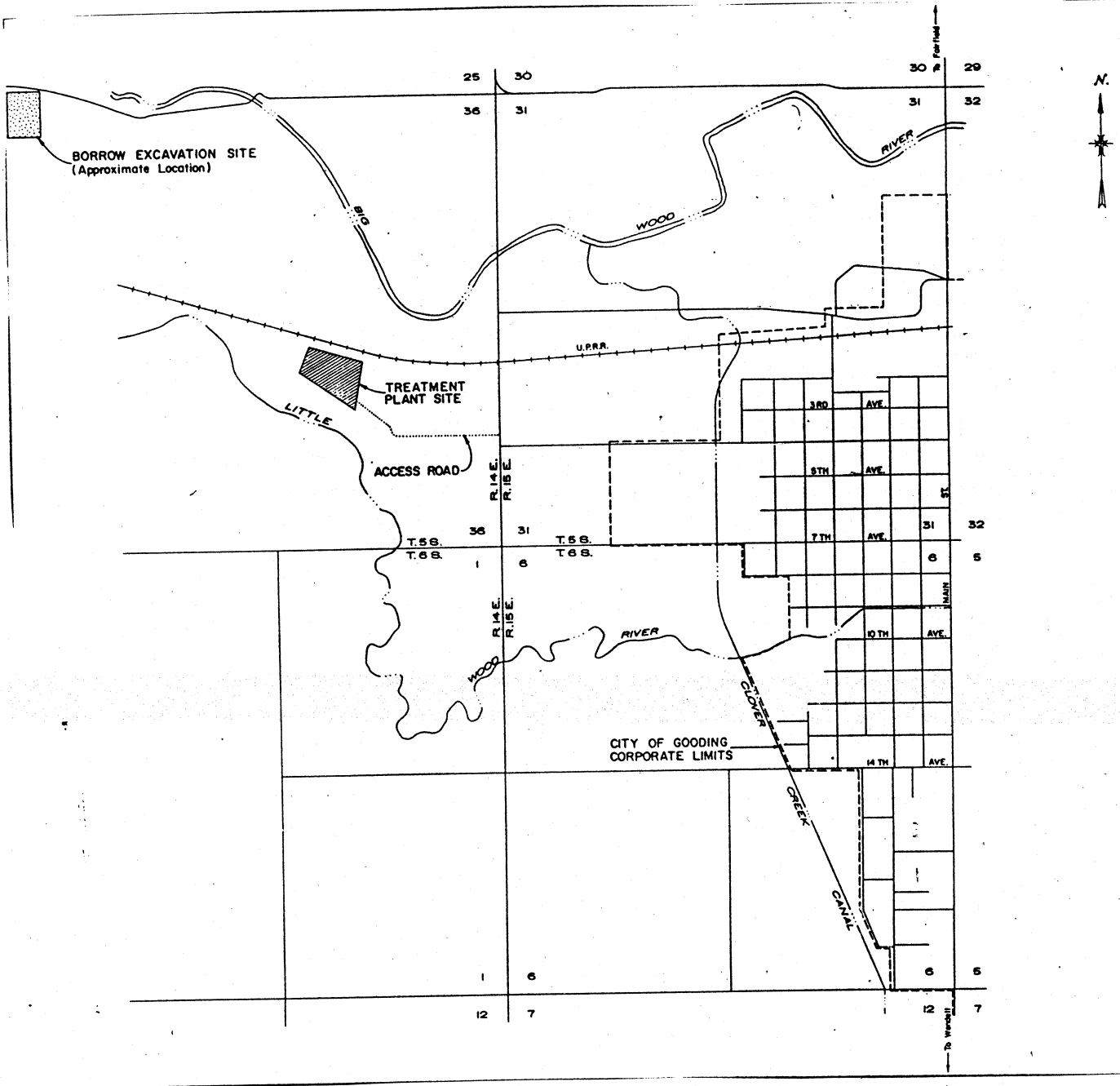
B. State Certification

Section 401 of the Clean Water Act requires EPA to seek state certification before issuing a final permit. As a result of the certification, the state may require more stringent permit conditions or additional monitoring requirements to ensure that the permit complies with water quality standards.

C. Permit Expiration

This permit will expire five years from the effective date of the permit.

APPENDIX A
Wastewater Treatment Plant Location



APPENDIX B
WATER QUALITY STANDARDS

(A) Water Quality Criteria

For the City of Gooding discharge, the following water quality criteria are necessary for the protection of the beneficial uses of the Little Wood River:

1. IDAPA 16.01.02.200.02 - Surface waters of the State shall be free from toxic substances in concentrations that impair designated beneficial uses.
2. IDAPA 16.01.02.200.05 - Surface waters of the State shall be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses.
3. IDAPA 16.01.02.200.06 - Excess Nutrient. Surface waters of the State shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses.
4. IDAPA 16.01.02.200.08 - Sediment. Sediment shall not exceed quantities specified in section 250, or , in the absence of specific sediment criteria, quantities which impair designated beneficial uses. Determinations of impairment shall be based on water quality monitoring and surveillance and the information utilized as described in Subsection 350.02.b.
5. IDAPA 16.01.02.250.01.a. - Primary Contact Recreation: between May 1 and September 30 of each calendar year, waters designated for primary contact recreation are not to contain fecal coliform bacteria significant to the public health in concentrations exceeding:
 1. 500/100 ml. at any time,
 2. 200/100 ml in more than ten percent of the total samples taken over a thirty day period; and
 3. a geometric mean of 50/100 ml based on a minimum of five samples taken over a thirty day period.
6. IDAPA 16.01.02.250.01.b. - Secondary Contact Recreation: waters designated for secondary contact recreation are not to contain fecal coliform bacteria significant to the public health in concentrations exceeding:
 1. 800/100 ml. at any time,
 2. 400/100 ml in more than ten percent of the total samples taken over a thirty day period; and
 3. a geometric mean of 200/100 ml based on a minimum of five samples taken over a

thirty day period.

7. IDAPA 16.01.02.250.02.a.i. - Hydrogen ion concentration (pH) values within the range of 6.5 to 9.5 standard units.
7. IDAPA 16.01.02.250.02.a.iii - The one (1) hour average concentration of total residual chlorine shall not exceed nineteen (19) µg/L. The four (4) day average concentration shall not exceed eleven (11) µg/L.
8. IDAPA 16.01.02.250.02.c.i - Dissolved oxygen concentrations shall exceed 6 mg/L at all times.
9. IDAPA 16.01.02.250.02.c.iii(1) - The one hour average concentration of un-ionized ammonia (as N) is not to exceed $(0.43/A/B/2)$ mg/L, where:

A = 1 if the water temperature (T) is ≤ 20 EC, or
A = $10^{(0.03(20-T))}$ if T < 20EC, and

B = 1 if the pH is ≥ 8.0 , or
B = $(1 + 10^{(7.4-pH)}) \div 1.25$ if pH is < 8.0

Using the 95th percentile downstream pH and temperature (8.4 standard units and 10.0 EC, respectively) the unionized ammonia criterion is 0.11 mg/L and the total ammonia criterion is 2.4 mg/L.

10. IDAPA 16.01.02.250.02.c.iii(2) - The four day average concentration of un-ionized ammonia (as N) is not to exceed $(0.66A/B/C)$ mg/L, where:

A = 1.4 if T is ≤ 15 EC, or
A = $10^{(0.03(20-T))}$ if T < 15EC, and

B = 1 if the pH is ≥ 8.0 , or
B = $(1 + 10^{(7.4-pH)}) \div 1.25$ if pH is < 8.0

C = 13.5 if pH is ≥ 7.7 , or
C = $20(10^{(7.7-pH)}) \div (1 + 10^{(7.4-pH)})$ if the pH is < 7.7

Using the 95th percentile downstream pH and temperature (8.4 standard units and 10.0 EC, respectively) the unionized ammonia criterion is 0.0245 mg/L and the total ammonia criterion is 0.56 mg/L.

(B) Anti-Degradation Policy

The State of Idaho has adopted an anti-degradation policy as part of their water quality standards. The anti-degradation policy represents a three tiered approach to maintain and protect various levels of water quality and uses. The three tiers of protection are as follows:

- Tier 1 - Protects existing uses and provides the absolute floor of water quality.
- Tier 2 - Protects the level of water quality necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water in waters that are currently of higher quality than required to support these uses. Before water quality in Tier 2 waters can be lowered, there must be an anti-degradation review consisting of: (1) a finding that it is necessary to accommodate important economic or social development in the area where the waters are located (2) full satisfaction of all intergovernmental coordination and public participation provisions; and (3) assurance that the highest statutory and regulatory requirements for point sources and best management practices for nonpoint sources are achieved. Furthermore, water quality may not be lowered to less than the level necessary to fully protect the “fishable/swimmable” uses and other existing uses.
- Tier 3 - Protects the quality of outstanding national resources, such as waters of national and State parks and wildlife refuges and waters of exceptional recreational or ecological significance. There may be no new or increased discharges to these waters and no new or increased discharges to tributaries of these waters that would result in lower water quality.

The Little Wood River is a tier 1 waterbody, therefore, water quality should be such that it results in no mortality and no significant growth or reproductive impairment of resident species. An NPDES permit cannot be issued that would result in the water quality criteria being violated. The draft permit contains effluent limits which ensures that the existing beneficial uses for the Little Wood River will be maintained.

APPENDIX C
Basis for Effluent Limitations

The CWA requires Publicly Owned Treatment Works to meet performance-based requirements (also known as technology based effluent limits) based on available wastewater treatment technology. EPA may find, by analyzing the effect of an effluent discharge on the receiving water, that technology based effluent limits are not sufficiently stringent to meet water quality standards. In such cases, EPA is required to develop more stringent, water quality-based effluent limits designed to ensure that water quality standards are met. The draft effluent limits reflect whichever limits (technology-based or water quality-based) are more stringent. The following explains in more detail the derivation of technology based effluent limits and water quality based effluent limits.

A. Technology-based Effluent Limitations

The CWA requires Publicly Owned Treatment Works to meet performance-based requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level, referred to as “secondary treatment,” that all POTWs were required to meet by July 1, 1977. EPA developed “secondary treatment” regulations which are specified in the 40 CFR 133. These technology-based effluent limits apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of five-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH. The technology based effluent limits applicable to the City of Gooding are as follows:

1. 5 day Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS):

Average Monthly Limit = 30 mg/L
Average Weekly Limit = 45 mg/L
Percent Removal Requirements = 85 %

2. Federal regulations at (40 CFR § 122.45 (f)) require BOD₅ and TSS limitations to be expressed as mass based limits using the design flow of the facility. The loading is calculated as follows: concentration X design flow X 8.34.

BOD and TSS loading, monthly average = 30 mg/L X 1.0 mgd X 8.34 = 250 lbs/day
BOD and TSS loading, weekly average = 45 mg/L X 1.0 mgd X 8.34 = 375 lbs/day

3. The pH range shall be between 6.0 - 9.0 standard units.
4. Fecal Coliform Bacteria: In addition to the above, the *Idaho Water Quality Standards and Wastewater Treatment Requirements* (IDAPA16.01.02.420.02.b) require that fecal coliform concentrations in treated effluent not exceed a geometric mean of 200 colonies/100ml

based on no more than one week's data and a minimum of five samples. IDEQ has determined that monitoring once per week will satisfy the Idaho water quality standards. IDEQ will include this monitoring frequency in their certification of the final permit.

B. Water Quality-based Evaluation

1. Statutory Basis for Water Quality-Based Limits

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards by July 1, 1977. Discharges to state waters must also comply with limitations imposed by the state as part of its certification of NPDES permits under section 401 of the CWA.

The NPDES regulation (40 CFR 122.44(d)(1)) implementing section 301 (b)(1)(C) of the CWA requires that permits include limits for all pollutants or parameters which "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality."

The regulations require that this evaluation be made using procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant in the effluent, species sensitivity (for toxicity), and where appropriate, dilution in the receiving water. The limits must be stringent enough to ensure that water quality standards are met, and must be consistent with any available wasteload allocation.

2. Reasonable Potential Determination

When evaluating the effluent to determine if water quality-based effluent limits are needed based on chemical specific numeric criteria, a projection of the receiving water concentration (downstream of where the effluent enters the receiving water) for each pollutant of concern is made. The chemical specific concentration of the effluent and ambient water and, if appropriate, the dilution available from the ambient water are factors used to project the receiving water concentration. If the projected concentration of the receiving water exceeds the numeric criterion for a specific chemical, then there is a reasonable potential that the discharge may cause or contribute to an excursion above the applicable water quality standard, and a water quality-based effluent limit is required (see Appendix B for the applicable water quality criteria).

As mentioned above, sometimes it is appropriate to allow a small area of ambient water to provide dilution of the effluent. These areas are called mixing zones. Mixing zone allowances will increase the mass loadings of the pollutant to the

water body, and decrease treatment requirements. Mixing zones can be used only when there is adequate ambient flow volume and the ambient water is below the criteria necessary to protect designated uses.

3. Procedure for Deriving Water Quality-Based Effluent Limits

The first step in developing a water quality based permit limit is to develop a wasteload allocation for the pollutant. A wasteload allocation is the concentration (or loading) of a pollutant that the Permittee may discharge without causing or contributing to an exceedance of water quality standards in the receiving water. Wasteload allocations are determined in one of the following ways:

(a) TMDL-Based Wasteload Allocation

Where the receiving water quality does not meet water quality standards, the wasteload allocation is generally based on a TMDL developed by the State. A TMDL is a determination of the amount of a pollutant from point, non-point, and natural background sources, including a margin of safety, that may be discharged to a water body without causing the water body to exceed the criterion for that pollutant. Any loading above this capacity risks violating water quality standards.

Section 303(d) of the CWA requires states to develop TMDLs for water bodies that will not meet water quality standards after the imposition of technology-based effluent limitations to ensure that these waters will come into compliance with water quality standards. The first step in establishing a TMDL is to determine the assimilative capacity (the loading of pollutant that a water body can assimilate without exceeding water quality standards). The next step is to divide the assimilative capacity into allocations for non-point sources (load allocations), point sources (wasteload allocations), natural background loadings, and a margin of safety to account for any uncertainties. Permit limitations are then developed for point sources that are consistent with the wasteload allocation for the point source.

A TMDL has not yet been completed for the Little Wood River.

(b) Mixing zone based WLA

When the State authorizes a mixing zone for the discharge, the WLA is calculated by using a simple mass balance equation. The equation takes into account the available dilution provided by the mixing zone, and the background concentrations of the pollutant.

(c) **Criterion as the Wasteload Allocation:**

In some cases a mixing zone cannot be authorized, either because the receiving water already exceeds the criteria or the receiving water flow is too low to provide dilution. In such cases, the criterion becomes the wasteload allocation. Establishing the criterion as the wasteload allocation ensures that the Permittee will not contribute to an exceedance of the criteria.

Once the wasteload allocation has been developed, the EPA applies the statistical permit limit derivation approach described in Chapter 5 of the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001, March 1991, hereafter referred to as the TSD) to obtain monthly average, and weekly average or daily maximum permit limits. This approach takes into account effluent variability, sampling frequency, and water quality standards.

4. **Water Quality-Based Effluent Limits**

(a) **Toxic Substances**

The Idaho state water quality standards require surface waters of the state to be free from toxic substances in concentration that impair designated uses. The administratively extended permit required the Permittee to conduct toxicity tests on its effluent. Results from these tests indicate that the whole effluent toxicity limits are not required for this discharge. Based on these results the toxicity testing requirements have also been deleted from the proposed permit.

(b) **Floating, Suspended or Submerged Matter**

The Idaho state water quality standards require surface waters of the state to be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses. Therefore, the draft permit specifies that there shall be no discharge of floating solids or visible foam in other than trace amounts.

(c) **Excess Nutrients**

The Idaho state water quality standards require surface waters of the state be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses. The Little Wood River has been listed as water quality limited for nutrients. As of this date a TMDL has not been established for this river. Nutrient monitoring

has been incorporated into the draft permit. The results of this monitoring will be used in the development of the TMDL. A reopener clause has also been incorporated into the draft permit to allow the permit to be reopened to incorporate the determinations made in the TMDL.

(d) **Sediment/TSS**

The Little Wood River is listed as water quality limited for sediment, however, a TMDL has not yet been established. The permit currently in effect has the following loading requirements:

Average monthly limit = 150 lbs/day
Average weekly limit = 225 lbs/day

These limits were incorporated into the permit based on a 1979 staff evaluation by the Idaho Department of Environmental Quality (IDEQ).

Section 403(o) of the Clean Water Act (CWA) prohibits backsliding of effluent limitations, except in very limited cases as outlined in Sections 402(o)(2) and 303(d)(4) of the CWA. This pollutant parameter does not qualify for any of the listed exceptions, therefore, the limits must be retained.

Additionally, a reopener clause has been incorporated into the draft permit to allow the permit to be reopened to incorporate the determinations made in the TMDL should they be more stringent than the requirements in this draft permit.

(e) **Fecal Coliform Bacteria**

The Little Wood River is listed as water quality limited for pathogens. Since there is no dilution available, the facility must meet the criteria at the end of the pipe. This will ensure that primary and secondary contact recreation uses are met in the river. The effluent limits are as follows:

May 1 - September 30: Average Monthly Limit = 50 colonies/100ml
Maximum Daily Limit = 500 colonies/100ml

October 1 - April 30: Average Monthly Limit = 200 colonies/100ml
Maximum Daily Limit = 800 colonies/100 ml

The permit currently in effect has the following loading requirements:

May 1 - September 30: Average Monthly Limit = 50 colonies/100ml
Average Weekly Limit = 100 colonies/100ml

October 1 - April 30: Average Monthly Limit = 100 colonies/100ml
Average Weekly Limit = 200 colonies/100 ml

These limits were incorporated into the permit based on a 1979 staff evaluation by the Idaho Department of Environmental Quality (IDEQ).

Section 403(o) of the Clean Water Act (CWA) prohibits backsliding of effluent limitations, except in very limited cases as outlined in Sections 402(o)(2) and 303(d)(4) of the CWA. This pollutant parameter does not qualify for any of the listed exceptions, therefore, the limits must be retained.

In addition to the above the Idaho water quality standards state that fecal coliform levels shall not exceed 200/100 ml in more than ten percent of the total samples taken over a thirty day period for primary contact recreation, and shall not exceed 400/100 ml in more than ten percent of the total samples taken over a thirty day period for secondary contact recreation. A review of the permittee's DMRs show that they have no reasonable potential to exceed these requirements, therefore, the limits do not need to be incorporated into the permit.

Additionally, a reopener clause has been incorporated into the draft permit to allow the permit to be reopened to incorporate the determinations made in the TMDL should they be more stringent than the requirements in this draft permit.

(f) **pH**

The Idaho state water quality standards require surface waters of the state to have a pH value within the range of 6.5 - 9.5 standard units.

(g) **Total Residual Chlorine**

The previous fact sheet for this facility (June 1990) determined that water quality-based effluent limits were required for chlorine. The calculated limits were not incorporated into the permit, at that time, because the effluent limits calculated were less than the analytical detection limits. Instead, the permit required the chlorine detection level be "below detectable levels."

Federal regulations require permit limits for publicly owned treatment works to be expressed as an average monthly limit and an average weekly limit unless impracticable. An effluent limit that is below the analytical detection limit does not make it impracticable to incorporate that limit into the permit. Therefore, the effluent limits have been recalculated and have been included in the proposed permit.

The inability to measure to the necessary level of detection is addressed by establishing the Minimum Level⁴ as the compliance evaluation level for use in reporting Discharge Monitoring Report data. Effluent discharges at or below the Minimum Level would be considered in compliance with the water quality-based effluent limit (*Draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-based Effluent Limitations Set Below Analytical Detection/Quantitation Levels*, March 1994).

EPA will consider the Permittee in compliance with the water quality based effluent limits that are below the analytical detection limit provided the effluent does not exceed the minimum level. The minimum level for chlorine is 100 µg/L (*Guidelines Establishing Test Procedures for analysis and Pollutants and National Primary Drinking Water Regulations*, March 28, 1997).

As mentioned previously, federal regulations require permit limits to be expressed as average monthly and average weekly limits, unless impracticable. Region 10 considers it impracticable to incorporate weekly limits into the permit because federal regulations do not prohibit a Permittee from increasing their sampling events above what is required in an NPDES permit. This is significant because a Permittee may collect as many samples as necessary during a week to bring the average of the data set below the average weekly effluent limit. In such cases, spikes of a pollutant could be masked by the increased sampling. While this is not a concern with pollutants that are not toxic, such as total suspended solids or phosphorus, it is a significant concern when toxic pollutants, such as chlorine or ammonia, are being discharged. Using a maximum daily limit instead of an average weekly limit will ensure that spikes do not occur, and will be protective of aquatic life. For these reasons EPA, Region 10 considers it impracticable to develop an average weekly limit for chlorine, and instead will incorporate a maximum daily limit. The average monthly limit is 13 µg/L (0.1 lbs/day)

4

Minimum Level - the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed.

and the maximum daily limit is 22 µg/L (0.2 lbs/day) (see page C-11 for calculations).

(h) **Dissolved Oxygen/BOD₅**

The Little Wood River is listed as water quality limited for dissolved oxygen (D.O.). The state water quality standards require the level of D.O. to exceed 6 mg/L at all times for water bodies that are protected for aquatic life use. Effluent data are not available to determine if the facility is meeting this requirement. Effluent monitoring will be required in the draft permit in order to determine if the facility will require a permit limit in the future.

BOD₅ is a measure of the amount of oxygen required to stabilize organic matter in wastewater. It measures the total concentration of dissolved oxygen that would eventually be demanded as wastewater degrades in the stream. Therefore, the BOD₅ loading from the wastewater treatment facility may impact downstream DO levels. In a 1979 staff evaluation IDEQ determined that the BOD₅ loading from the facility may impact D.O. levels in the Little Wood River. IDEQ required the discharge to meet the following limits:

Average Monthly Limit = 150 lbs/day
Average Weekly Limit = 225 lbs/day

Section 403(o) of the Clean Water Act (CWA) prohibits backsliding of effluent limitations, except in very limited cases as outlined in Sections 402(o)(2) and 303(d)(4) of the CWA. This pollutant parameter does not qualify for any of the listed exceptions, therefore, the limits must be retained.

Additionally, a reopener clause has been incorporated into the draft permit to allow the permit to be reopened to incorporate the determinations made in the TMDL should they be more stringent than the requirements in this draft permit.

(i) **Ammonia**

IDEQ has developed water quality criteria to protect aquatic life against short term and long term adverse impacts from ammonia. A reasonable potential analysis was conducted and it was found that water quality based effluent limits are required for ammonia. The average monthly limit is 0.5 mg/L (4.2 lbs/day) and the maximum daily limit is 1.3 mg/l (10.8 lbs/day). For additional information on the reasonable potential analysis see page C-9, for additional information on the development of the effluent limits see page C-14.

Total Ammonia Reasonable Potential Analysis

In the case of the Little Wood River the beneficial use that needs to be protected is aquatic life. The acute criterion for ammonia is 2.41 mg/L and the chronic criterion is 0.56 mg/L. The acute criterion protects against short term impacts to aquatic life, and the chronic criterion protects against long term impacts to aquatic life.

When evaluating the effluent to determine if a water quality based effluent limit (WQBEL) is needed based on chemical specific numeric criteria, a projection of the receiving water concentration (downstream of where the effluent enters the receiving water) for the pollutant of concern is made. If the projected concentration of the receiving water exceeds the applicable numeric criterion, then there is a reasonable potential that the discharge may cause or contribute to an excursion above the applicable water quality standards, and a WQBEL is required.

The following mass balance equation is used to determine the downstream receiving water concentration:

$$C_d = \frac{(C_e \times Q_e) + (C_u \times (Q_u \times \%MZ))}{Q_e + (Q_u \times \%MZ)}$$

where,

C_d = receiving water concentration downstream of the effluent discharge

C_e = maximum projected effluent concentration =

Q_e = maximum effluent flow = 1.0 mgd

C_u = upstream concentration of pollutant = 0.419 mg/L

Q_u = upstream flow = 1.94 mgd

%MZ = assume 25 percent mixing zone is authorized by the IDEQ

When determining the projected receiving water concentration, EPA's *Technical Support Document for Water Quality-based Toxics Controls* (TSD, 1991) recommends using the maximum projected effluent concentration. To determine the maximum projected effluent concentration (C_e) EPA has developed a statistical approach to better characterize the effects of effluent variability. The approach combines knowledge of effluent variability as estimated by a coefficient of variation (CV) with the uncertainty due to a limited number of data to project an estimated maximum concentration for the effluent. Once the CV has been calculated, the reasonable potential multiplier used to derive the maximum projected effluent concentration (C_e) can be found in Table 3-1 of EPA's TSD. A reasonable potential multiplier may vary from a low of 1 to 368.

The maximum projected concentration (C_e) for the effluent is equal to the highest observed concentration value of the data set multiplied by the maximum projected concentration. Data from January 3, 1996 through March 19, 1999 was used to determine the maximum projected concentration. Data from March 2, 1999 was considered an outlier and not used in the calculations. The highest value observed was on February 2, 1998. It was 1.14 mg/L. The CV is 1.4. The

reasonable potential multiplier is 3.3. The maximum projected concentration (C_e) is 4.6 mg/L (1.4mg/L X 3.3).

The downstream receiving water concentration (C_d) is:

$$C_d = \frac{(C_e \times Q_e) + (C_u \times (Q_u \times \%MZ))}{Q_e + (Q_u \times \%MZ)}$$

$$C_d = \frac{(4.6 \times 1.0) + (0.419 \times (1.94 \times 0.25))}{1.0 + (1.94 \times 0.25)} = \frac{4.8}{1.5} = 3.2 \text{ mg/L}$$

The projected concentration downstream exceeds the acute and the chronic criterion for ammonia (2.41 mg/L and 0.56 mg/L respectively), therefore, a water quality based effluent limit is required.

**Derivation of Water Quality Based
Effluent Limitations for
Total Residual Chlorine and Total Ammonia**

The purpose of a permit limit is to specify an upper bound of acceptable effluent quality. For water quality based requirements, the permit limits are based on maintaining the effluent quality at a level that will comply with the water quality standards, even during critical conditions in the receiving water (i.e., low flows). These requirements are determined by the wasteload allocation (WLA). The WLA dictates the required effluent quality which, in turn, defines the desired level of treatment plant performance or target long-term average (LTA).

To support the implementation of EPA's national policy for controlling the discharge of toxicants, EPA developed the "*Technical Support Document for Water Quality-Based Toxics Control*" (EPA/505/2-90-001, March 1991). The following is a summary of the procedures recommended in the TSD in deriving water quality-based effluent limitations for toxicants. This procedure translates water quality criteria for chlorine and ammonia to "end of the pipe" effluent limits.

(1) Total Residual Chlorine Calculation

Step 1- Determine the WLA

The acute and chronic aquatic life criteria are converted to acute and chronic waste load allocations (WLA_{acute} or $WLA_{chronic}$) for the receiving waters based on the following mass balance equation:

$$Q_d C_d = Q_e C_e + Q_u C_u$$

where,

- Q_d = downstream flow = $Q_u + Q_e$
- C_d = aquatic life criteria that cannot be exceeded downstream
 - $C_{d(acute)} = 19 \mu\text{g/L}$
 - $C_{d(chronic)} = 11 \mu\text{g/L}$
- Q_e = effluent design flow = 1 mgd
- C_e = concentration of pollutant in effluent = WLA_{acute} or $WLA_{chronic}$
- Q_u = upstream flow = 1.94 mgd
- C_u = upstream background concentration of pollutant = 0 (no data available therefore, assume there is no background concentration)

Rearranging the above equation to determine the effluent concentration (C_e) or the wasteload allocation (WLA) results in the following:

$$C_e = WLA = \frac{Q_d C_d - Q_u C_u}{Q_e}$$

when a mixing zone is allowed, this equation becomes:

$$C_e = WLA = \frac{C_d(Q_u X \%MZ) + C_d Q_e - Q_u C_u (\%MZ)}{Q_e}$$

where, %MZ is the mixing zone⁵ allowable by the state standards. The Idaho water quality standards at IDAPA 16.01.02060 allow twenty-five percent (25%) of the receiving water to be used for dilution for aquatic life criteria. The effluent limits have been derived using Idaho's guidelines for mixing zone. However, establishing a mixing zone is a State discretionary function, if the State does not certify a mixing zone in the 401 certification process the effluent limits will be recalculated without a mixing zone.

$$WLA_{acute} = \frac{C_d(Q_u \times \%MZ) + C_d Q_e}{Q_e} - \frac{Q_u C_u (\%MZ)}{Q_e}$$

$$= \frac{19(1.94 \times .25) + (19 \times 1)}{1} - \frac{1.94 \times 0 (.25)}{1} = 28.2 \mu\text{g/L}$$

$$WLA_{chronic} = \frac{11(1.94 \times .25) + (11 \times 1)}{1} - \frac{1.94 \times 0 (.25)}{1} = 16.3 \mu\text{g/L}$$

Step 2 - Determine the LTA

The acute and chronic WLAs are then converted to Long Term Average concentrations (LTA_{acute} and LTA_{chronic}) using the following equations:

$$LTA_{acute} = WLA_{acute} \times e^{[0.5F^2 - zF]}$$

where,

$$F^2 = \ln(CV^2 + 1)$$

$$z = 2.326 \text{ for } 99^{\text{th}} \text{ percentile probability basis}$$

$$CV = \text{coefficient of variation} = .3$$

$$LTA_{chronic} = WLA_{chronic} \times e^{[0.5F^2 - zF]}$$

where,

$$F^2 = \ln(CV^2/4 + 1)$$

$$z = 2.326 \text{ for } 99^{\text{th}} \text{ percentile probability basis}$$

$$CV = \text{coefficient of variation} = \text{standard deviation/mean (the CV was calculated using data from January 1995 through March 1999)}$$

Calculate the LTA_{acute} and the LTA_{chronic} :

$$LTA_{acute} = 14.9 \mu\text{g/L}$$

$$LTA_{chronic} = 11.6 \mu\text{g/L}$$

⁵ Mixing zone - is an allocated impact zone where water quality criteria can be exceeded as long as acutely toxic conditions are prevented. Only the State of Idaho has the regulatory authority to grant a mixing zone.

Step 3

To protect a waterbody from both acute and chronic effects, the more limiting of the calculated LTA_{acute} and $LTA_{chronic}$ is used to derive the effluent limitations. The TSD recommends using the 95th percentile for the Average Monthly Limit (AML) and the 99th percentile for the Maximum Daily Limit (MDL).

Step 4 - Determine the Permit Limits

1. The maximum daily limit (MDL) and the average monthly limit (AML) would be calculated as follows:

$$MDL = LTA_{chronic} \times e^{[zF - 0.5F^2]}$$

where,

$$F^2 = \ln(CV^2 + 1)$$

$$z = 2.326 \text{ for } 99^{\text{th}} \text{ percentile probability basis}$$

$$CV = 3$$

$$MDL = 22.0 \mu\text{g/L}$$

$$AML = LTA_{chronic} \times e^{[zF - 0.5F^2]}$$

where,

$$F^2 = \ln(CV^2/n + 1)$$

$$z = 1.645 \text{ for } 95^{\text{th}} \text{ percentile probability basis}$$

$$CV = \text{coefficient of variation} = \text{standard deviation/mean}$$

$$n = \text{number of sampling events required per month for chlorine} = 20$$

$$AML = 13.0 \mu\text{g/L}$$

Step 5 - Loading limitations

Federal regulations (40 CFR 122.45 (f)) require effluent limits to be expressed as mass based limits. The mass loading limitations for chlorine is as follows:

$$AML = (\text{AML Concentration})(\text{Design Flow Rate})(\text{Conversion Factor})$$

where:

$$\text{Monthly Concentration Limit} = .013 \text{ mg/L}$$

$$\text{Design Flow Rate} = 1.0 \text{ mgd}$$

$$\text{Conversion Factor} = 8.34$$

$$AML = 0.1 \text{ lbs/day}$$

$$MDL = (\text{MDL Concentration})(\text{Design Flow Rate})(\text{Conversion Factor})$$

where:

$$\text{Daily Maximum Concentration} = .022 \text{ mg/L}$$

$$MDL = 0.2 \text{ lbs/day}$$

(2) Total Ammonia Calculation

C_d = aquatic life criteria that cannot be exceeded downstream

$$C_{d(\text{acute})} = 2.4 \text{ mg/L}$$

$$C_{d(\text{chronic})} = 0.56 \text{ mg/L}$$

Q_e = effluent design flow = 1 mgd

C_e = concentration of pollutant in effluent = WLA_{acute} or WLA_{chronic}

Q_u = upstream flow = 1.94 mgd

C_u = upstream background concentration of pollutant = 0.42 mg/L (Data from January 3, 1996 through March 19, 1999 was used to determine the 95th percentile background concentration).

Step 1- Determine the WLA

$$\begin{aligned} WLA_{\text{acute}} &= \frac{C_d(Q_u \times \%MZ) + C_d Q_e - Q_u C_u (\%MZ)}{Q_e} \\ &= \frac{2.4(1.94 \times .25) + (2.4 \times 1) - 1.94 \times 0.42 (.25)}{1} = 3.4 \text{ mg/L} \end{aligned}$$

$$WLA_{\text{chronic}} = \frac{0.56(1.94 \times .25) + (0.56 \times 1) - 1.94 \times 0.42 (.25)}{1} = 0.6 \text{ mg/L}$$

Step 2 - Determine the LTA

The acute and chronic WLAs are then converted to Long Term Average concentrations (LTA_{acute} and LTA_{chronic}) using the following equations:

$$LTA_{\text{acute}} = WLA_{\text{acute}} \times e^{[0.5F^2 - zF]}$$

where,

$$F^2 = \ln(CV^2 + 1)$$

z = 2.326 for 99th percentile probability basis

CV = coefficient of variation = 1.4

$$LTA_{\text{chronic}} = WLA_{\text{chronic}} \times e^{[0.5F^2 - zF]}$$

where,

$$F^2 = \ln(CV^2/4 + 1)$$

z = 2.326 for 99th percentile probability basis

CV = coefficient of variation = standard deviation/mean (the CV was calculated using data from January 1996 through March 1999)

Calculate the LTA_{acute} and the LTA_{chronic} :

$$LTA_{\text{acute}} = 0.5 \text{ mg/L}$$

$$LTA_{\text{chronic}} = 0.2 \text{ mg/L}$$

Step 3

To protect a waterbody from both acute and chronic effects, the more limiting of the calculated LTA_{acute} and $LTA_{chronic}$ is used to derive the effluent limitations. The TSD recommends using the 95th percentile for the Average Monthly Limit (AML) and the 99th percentile for the Maximum Daily Limit (MDL).

Step 4 - Determine the Permit Limits

1. The maximum daily limit (MDL) and the average monthly limit (AML) would be calculated as follows:

$$MDL = LTA_{chronic} \times e^{[zF - 0.5F^2]}$$

where,

$$F^2 = \ln(CV^2 + 1)$$

$$z = 2.326 \text{ for } 99^{\text{th}} \text{ percentile probability basis}$$

$$CV = 1.4$$

$$\mathbf{MDL = 1.3 \text{ mg/L}}$$

$$AML = LTA_{chronic} \times e^{[zF - 0.5F^2]}$$

where,

$$F^2 = \ln(CV^2/n + 1)$$

$$z = 1.645 \text{ for } 95^{\text{th}} \text{ percentile probability basis}$$

$$CV = \text{coefficient of variation} = \text{standard deviation/mean}$$

$$n = \text{number of sampling events required per month for ammonia} = 4$$

$$\mathbf{AML = 0.5 \text{ mg/L}}$$

Step 5 - Loading limitations

Federal regulations (40 CFR 122.45 (f)) require effluent limits to be expressed as mass based limits. The mass loading limitations for chlorine is as follows:

$$AML = (\text{AML Concentration})(\text{Design Flow Rate})(\text{Conversion Factor})$$

where:

$$\text{Monthly Concentration Limit} = 0.5 \text{ mg/L}$$

$$\text{Design Flow Rate} = 1.0 \text{ mgd}$$

$$\text{Conversion Factor} = 8.34$$

$$\mathbf{AML = 4.2 \text{ lbs/day}}$$

$$MDL = (\text{MDL Concentration})(\text{Design Flow Rate})(\text{Conversion Factor})$$

where:

$$\text{Daily Maximum Concentration} = 1.3 \text{ mg/L}$$

$$\mathbf{MDL = 10.8 \text{ lbs/day}}$$

(C) Comparison of Technology Based Effluent Limits and Water Quality Based Effluent Limits

The following is a summary of the more stringent of the technology based effluent limits from Section A and water quality based effluent limits from Section B, these are the limits that are proposed in the draft permit:

1. The effluent pH range shall be between 6.5 - 9.0 standard units.
2. 85% Removal Requirements for BOD₅ and TSS: For any month, the monthly average effluent concentration shall not exceed 15 percent of the monthly average influent concentration.
3. There shall be no discharge of floating solids or visible foam other than trace amounts.

TABLE C-1: Monthly, Weekly and Daily Effluent Limitations

Parameters	Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit
BOD ₅	30 mg/L (150 #/day)	45 mg/L (225 #/day)	---
TSS	30 mg/L (150 #/day)	45 mg/L (225 #/day)	---
Fecal Coliform Bacteria May 1-September 30	50 colonies/100 ml	100 colonies/100 ml	500 colonies/100 ml
Fecal Coliform Bacteria October 1- April 30	100 colonies/100 ml	200 colonies/100 ml	800 colonies/100 ml
Total Residual Chlorine	13.0 µg/L (0.1 #/day)	---	22.0 µg/L (0.2 #/day)
Total Ammonia	0.5 mg/L (4.2 #/day)	---	1.3 mg/L (10.8 mg/L)

APPENDIX D
ENDANGERED SPECIES ACT

Section 7 of the Endangered Species Act (ESA) requires federal agencies to request a consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service regarding potential effects an action may have on listed endangered species.

In a letter dated November 3, 1999, the U.S. Fish and Wildlife Service identified the Gray wolf and Ute ladies' - tresses (a plant found in wet meadows and river meanders) as being federally-listed endangered species. There are no proposed or candidate species in the area of the discharge. In a letter dated October 22, 1999, the National Oceanic and Atmospheric Administration, National Marine Fisheries Service did not indicate that there were any threatened or endangered species within the area of the discharge.

EPA has determined that the requirements contained in the draft permit will not have an impact on the gray wolf or Ute ladies' - tresses. Hunting and habitat destruction are the primary causes of the gray wolf's decline. Modification of riparian and wetland habitats associated with livestock grazing, vegetation removal, excavation, construction, stream channelization, and actions that alter hydrology are the primary causes for adverse impacts to Ute ladies' - tresses. Issuance of an NPDES permit for the City of Gooding wastewater treatment plant will not result in habitat destruction, nor will it result in changes in population that could result in increased habitat destruction.