United States Environmental Protection Agency Region 10 1200 Sixth Avenue Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE AND LANDFILL/LAND APPLY/TRANSFER SEWAGE SLUDGE (BIOSOLIDS) UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 <u>et seq.</u>, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act",

City of Caldwell 621 Cleveland Blvd. Caldwell, Idaho 83605

is authorized to discharge from Outfall 001 at the wastewater treatment facility located at Caldwell, Idaho. Outfall 001 is located at latitude 43° 41' 43" and longitude 116° 41' 19".

to receiving waters named the Boise River,

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein, and is authorized to Landfill, Land Apply or Transfer Biosolids, in accordance with application sites, specific limitations, monitoring requirements, management practices, and other conditions set forth herein.

This permit shall become effective February 1, 1999.

This permit and the authorization to discharge and Landfill/Land Apply/Transfer Biosolids shall expire at midnight, February 2, 2004.

Signed this 29th day of December, 1998.

/s/ Roger K. Mochnick for

Director, Office of Water Region 10 U.S. Environmental Protection Agency

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I. SPECIFIC LIMITATIONS AND MONITORING REQUIREMENTS

A. Effluent Limitations and Monitoring Requirements

1. During the period beginning on the effective date of this permit, and lasting through the expiration date, the permittee is authorized to discharge wastewater to the Boise River from Outfall 001 provided the discharge meets the limitations and monitoring requirements set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or nonroutine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application.

	EFF	LUENT LIMITA	TIONS	MONITORING REQUIREMENTS ¹			
PARAMETER	Average Monthly Limit	Average Weekly Limit	Daily Maximum Limit	Sample Location	Sample Frequency	Sample Type	
Flow, MGD				Effluent	Continuou s	Recording	
Biochemical Oxygen	30 mg/l	45 mg/l		Influent	1/week	24-hour	
Demand (BOD₅)	2125 lbs/day	3183 lbs/day		and Effluent		composite	
Total Suspended	30 mg/l	45 mg/l		Influent	1/week	24-hour	
Solids (TSS)	2831 lbs/day	3183 lbs/day		and Effluent		composite	
pH, standard units	Between 6.5 and 9.0		Effluent	5/week	grab		
Fecal Coliform Bacteria ² May-September October-April	50/100 ml 200/100 ml	200/100 ml 200/100 ml	500/100 ml 800/100 ml	Effluent Effluent	5/week 5/week	grab grab	
E. Coli Bacteria				Effluent	1/month	grab	
Effective Date of Permit through	1.5 mg/l			Effluent	5/week	grab	
6/30/2001: Total Residual Chlorine ³	106 lbs/day						
Effective 7/1/2001: Total Residual	0.018 mg/l	_	0.04 mg/l	Effluent	5/week	grab	
Chlorine ³ March-June	1.27 lbs/day	_	2.83 lb/day				
CONTINUED ON NEXT PAGE							

	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS ¹		
PARAMETER	Average Monthly Limit	Average Weekly Limit	Daily Maximum Limit	Sample Location	Sample Frequency	Sample Type
Effective 7/1/2001: Total Residual	0.025 mg/l	_	0.056 mg/l	Effluent	5/week	grab
Chlorine ³ July-October	1.77 lbs/day	_	3.96 lb/day			
Effective 7/1/2001: Total Residual	0.019 mg/l	_	0.043 mg/l	Effluent	5/week	grab
Chlorine ³ November-February	1.34 lbs/day	_	3.04 lb/day			
Effective 7/1/2000:	1.09 mg/L		2.20 mg/L	Effluent	1/week	24-hour
Total Ammonia March-June	77.09 lbs/day		155.59 lbs/day			composite
Effective 7/1/2000:	4.94 mg/l		9.92 mg/l	Effluent	1/week	24-hour
Total Ammonia July-October	349.37 lbs/day		701.57 lbs/day			composite
Effective 7/1/2000:	2.53 mg/L		5.07 mg/L	Effluent	1/week	24-hour composite
Total Ammonia November-February	178.93lbs/day		358.57 lbs/day			
Hardness (as CaCO ₃), ⁷ mg/L				Effluent	1/month	24-hour composite
Total Kjeldahl Nitrogen⁵, mg/L				Effluent	1/week	24-hour composite
Nitrate-Nitrite ⁵ , mg/L				Effluent	1/week	24-hour composite
Total Phosphorus ⁵ , mg/l				Effluent	1/week	24-hour composite
Ortho-Phosphate⁵, mg/L				Effluent	1/week	24-hour composite
Temperature, ⁶ C				Effluent	5/week	grab
Turbidity ⁵ , NTU				Effluent	1/week	24-hour composite
CONTINUED ON NEXT PAGE						

	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS ¹		
PARAMETER	Average Monthly Limit	Average Weekly Limit	Daily Maximum Limit	Sample Location	Sample Frequency	Sample Type
Arsenic ^{4,7} , μg/L	_	_	_	Effluent	1/month	24-hour composite
Cadmium ^{4,7} , μg/L	_	_	_	Effluent	1/month	24-hour composite
Copper ^{,4,7} , µg/L				Effluent	1/month	24-hour composite
Chromium ^{4,7} , µg/L				Effluent	1/month	24-hour composite
Lead ^{4,7} , µg/L				Effluent	1/month	24-hour composite
Nickel ^{,4,7} , μg/L				Effluent	1/month	24-hour composite
Silver ^{4,7} , μg/L				Effluent	1/month	24-hour composite
Zinc ^{4,7} , μg/L				Effluent	1/month	24-hour composite
Whole Effluent Toxicity ⁸ , TU _c				Effluent	2/year	24-hour composite

- 1. If an analytical value is "less than the method detection limit, the permittee shall report "< [numerical method detection limit]" on the Discharge Monitoring Report (DMR). For example, if the laboratory reports "not detected" for a sample, and states that the method detection limit is "5 µg/L" then the permittee shall report "< 5 µg/L" on the DMR. For method detection limits see section I.B.5.
- 2. From May through September, the average monthly fecal coliform count must not exceed a geometric mean of 50/100 ml based on a minimum of five (5) samples per month. From October through April, the average monthly fecal coliform count must not exceed a geometric mean of 200/100 ml based on a minimum of five (5) samples per month. The average weekly fecal coliform count shall not exceed a geometric mean of 200/100 ml based on a minimum of five (5) samples per week.
- 3. Chlorine limits and monitoring requirements apply only when the chlorine disinfection system is in use. Some of the effluent limits for total residual chlorine are not quantifiable using EPA approved analytical methods. EPA will use the Interim Minimum Level of 100 μ g/L as the compliance evaluation level for this parameter.
- 4. For method detection limits for these parameters see section I.B.5.
- 5. These parameters shall be analyzed for a period of two (2) years. Monitoring shall start 150 days after the effective date of the permit. The sampling frequency for total kjeldahl nitrogen, nitrate-nitrite, total phosphorus and ortho phosphorus shall be 1/week for one year. After one year, the sampling frequency may be less provided the requirements of Section I.A.2 are met.
- 6. Weekly temperature samples shall be taken at the hottest part of the day.
- 7. These parameters shall be analyzed for a period of 18 months. Monitoring shall start 150 days after the effective date of the permit. With the exception of mercury, metals shall be analyzed as total recoverable. Mercury shall be analyzed as total.
- 8. See Section I.C. of the permit for additional information on monitoring requirements for whole effluent toxicity.

- 2. Reduced Nutrient Sampling Frequency: After one year of monitoring, the sampling frequency for total kjeldahl nitrogen, nitrate-nitrite, total phosphorus and orthophosphorus may be reduced during the second year of monitoring to either biweekly or monthly, if the data collected in the first year meet the following conditions:
 - Bi-weekly monitoring: After one year of weekly monitoring, the permittee may monitor the parameters listed above on a bi-weekly frequency during the second year of monitoring if, using a Student's t-test for equality of means, no statistically significant difference can be demonstrated between the arithmetic average of the weekly data during the first year and the arithmetic average of a bi-weekly subset (representing all twelve months) of the data collected during the first year, or
 - Monthly monitoring: After one year of weekly monitoring, the permittee may monitoring the parameters listed above on a monthly frequency during the second year of monitoring if, using a Student's t-test for equality of means, no statistically significant difference can be demonstrated between the arithmetic average of the weekly data during the first year and the arithmetic average of a monthly subset (representing all twelve months) of the data collected during the first year.
- 3. There shall be no discharge of floating solids or visible foam other than trace amounts.
- 4. 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.
 - Percent removal of BOD₅ and TSS shall be reported on the Discharge Monitoring Reports (DMRs). For each parameter, the monthly average percent removal shall be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month. Influent and effluent samples shall be taken over approximately the same time period.
- 5. Temperature Monitoring Requirements: Once per month the effluent temperature shall be measured hourly for a twenty-four (24) hour period. Monitoring shall be concurrent with the temperature monitoring requirements in section I.B.6.
- 6. Dissolved Oxygen Effluent Limits and Monitoring Requirements: The effluent dissolved oxygen concentration must be, at a minimum, 6.0 mg/l at all times, and the minimum saturation shall be 90%. Effluent dissolved oxygen shall be monitored once per week, using the grab sample collection method.

B. <u>Ambient Monitoring Requirements</u>

The permittee shall implement an ambient monitoring program. Ambient monitoring shall start 150 days after the effective date of the permit. Monitoring for hardness and metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc shall continue for a period of 18 months. The monitoring for other parameters shall continue for 24 months. The program shall meet the following requirements:

- 1. A monitoring station shall be established in the Boise River. The location of the monitoring stations shall be above the influence of the facility's discharge.
 - The monitoring station shall be approved by the Idaho Division of Environmental Quality (IDEQ) and EPA.
- 2. To the extent practicable, ambient sample collection shall occur on the same day as effluent sample collection.
- 3. With the exception of flow, ambient samples shall be grab samples.
- 4. Ambient sampling shall be conducted as follows:

Parameter ¹	Upstream Sampling Frequency	Downstream Sampling Frequency				
Flow ² , mgd	1/week					
BOD ₅ , mg/L	1/week					
TSS, mg/L	1/week					
Fecal Coliform Bacteria, colonies/100 ml	1/week					
Dissolved Oxygen, mg/L	1/week	Calculated, 1/week				
Total Phosphorus ³ , mg/L	1/week	Calculated, 1/week				
Ortho-Phosphorus ³ , mg/L	1/week	Calculated, 1/week				
Total Ammonia as N³, mg/L	1/week	Calculated, 1/week				
Total Kjeldahl Nitrogen ³ , mg/L	1/week	Calculated, 1/week				
Nitrate-Nitrite ³ , mg/L	1/week	Calculated, 1/week				
Temperature ⁴ , °C ²	1/week	Calculated, 1/week				
pH, standard units	1/week	Calculated, 1/week				
Turbidity, NTU	1/week	Calculated, 1/week				
Hardness as CaCO ₃ , mg/L	1/month	Calculated, 1/month				
CONTINUED ON NEXT PAGE						

Parameter ¹	Upstream Sampling Frequency	Downstream Sampling Frequency	
Arsenic, µg/L	1/month		
Cadmium, μg/L	1/month		
Chromium	1/month		
Copper, µg/L	1/month		
Lead, µg/L	1/month		
Mercury, μg/L	1/month		
Nickel, μg/L	1/month		
Silver, μg/L	1/month		
Zinc, μg/L	1/month		

- 1. Arsenic, cadmium, chromium, copper, lead, nickel, silver and zinc shall be analyzed at dissolved. Mercury shall be analyzed as total.
- 2. Flow rate shall be measured as near as practical to the time that other ambient parameters are sampled. Flow shall be measured from the Chicago Street bridge, approximately 1300 feet upstream from the plant outfall.
- 3. Sampling frequency for these parameters shall be 1/week for the first year. After the first year of monitoring, the sampling frequency may be decreased provided the requirements of Section I.A.2 are met.
- 4. Temperature shall be taken during the hottest part of the day.
 - 5. At a minimum, analytical methods should achieve the following method detection limits:

Parameter	Method Detection Limit ¹		
Arsenic	2 μg/L		
Cadmium	.5 μg/L		
Chromium	2 μg/L		
Copper	5 μg/L		
Lead	1 μg/L		
Mercury	.2 μg/L		
Nickel	5 μg/L		
Zinc	5 μg/L		
Silver	2 μg/L		
The permittee may request less restrictive method detection limits for monitoring. The request shall be submitted to EPA in writing, and			

is subject to FPA approval

- 6. Temperature Monitoring Requirements: Once per month the upstream and downstream ambient temperature shall be measured hourly for a twenty-four (24) hour period. Monitoring shall be concurrent with the twenty-four hour effluent temperature monitoring requirements (see section I.A.5).
- 7. Ambient monitoring shall be submitted in accordance with reporting requirements specified in Part II.C of this permit.

C. Whole Effluent Toxicity Testing

Whole Effluent Toxicity Testing will be required beginning July 1, 2001, and continuing for the duration of the permit. Toxicity tests shall be performed semi-annually, once during the period from April 1 through October 31, and once during the period November 1 through March 31. WET testing shall continue for the duration of the permit.

1. Test Species and Methods:

- a. The permittee shall conduct short-term tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test), and the fathead minnow, *Pimephales promelas* (larval survival and growth test).
- b. The presence of chronic toxicity shall be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Third Edition, EPA/600-4-91-002, July 1994.

2. Quality Assurance

- a. A series of five dilutions and a control shall be tested. The dilution series shall include 6.25, 12.5, 25, 50, and 100 percent.
- b. If organisms are not cultured in-house, concurrent testing with reference toxicants shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient.
- c. If either the reference toxicant tests or the effluent tests do not meet all test acceptability criteria (TAC) as specified in the test methods manual, then the permittee must re-sample and re-test as soon as possible.
- d. Reference toxicant test shall be conducted using the same test conditions as the effluent toxicity test (i.e., same test duration, etc.).
- e. Control and dilution water should be laboratory water as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.

f. Chemical testing for the parameters listed in Part I.A.1 of this permit shall be performed on a split sample collected for WET testing. To the extent that the timing of sample collection coincides with that of the sampling required in Part I.A.1. of this permit, chemical analysis of the split sample will fulfill the requirements of Part I.A.1.

3. Reporting:

- a. Results of toxicity tests shall be reported on the Discharge Monitoring Report (DMR) for the month in which the tests are conducted. Results shall be reported in chronic toxic units (TU_c), where $TU_c = 100/NOEC$.
- b. The full report shall be submitted by the end of the month in which the DMR is submitted.
- c. The full report shall consist of: (1) the toxicity test results; (2) the dates of sample collection and initiation of each toxicity test; (3) the flow rate at the time of sample collection; and (5) the results of the effluent analysis for chemical parameters required for the outfall as defined in Part I.A.1. of the permit.
- d. Test results for chronic tests shall be reported according to the chapter on Report Preparation found in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Third Edition, EPA/600-4-91-002, July 1994.

D. <u>Pretreatment Requirements</u>

- 1. Metals and Cyanide Sampling: The permittee shall sample once during the period from April 1 through October 31, and once during the period from November 1 through March 31 each year, for the arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver and zinc. At a minimum, sampling should achieve the method detection limits specified in Part I.B.5.
- 2. Sampling Locations and Sample Type: Sampling shall be conducted on the influent, effluent, and final sludge. Each sample shall be a 24-hour composite (except for cyanide see D.5 below).
- 3. Sampling Frequency: Samples shall be collected three consecutive days per week (Monday through Friday).
- 4. Sampling Results: The analytical results for the influent and effluent samples shall be reported as total in mg/L. Analytical results for sludge shall be reported in mg/kg (dry weight). Additionally, the permittee shall

report the percent of solids in the sludge.

Sampling results shall be submitted with the Pretreatment Annual Report (see section II.D. of this permit).

5. Cyanide Monitoring: Influent and effluent sampling for cyanide shall be conducted as follows. Eight discrete grab samples shall be collected over an operating day. Each grab sample shall be at least 100 ml. Each sample shall be checked for the presence of sulfides and chlorine prior to preserving and compositing (refer to *Standard Methods*, 4500-CN B). When sulfides are present, the holding time for a sample is 24 hours; when sulfides are removed from a sample, the holding time is 14 days. If sulfides or chlorine is detected, the sample must be treated to remove any trace of these parameters. After testing and treating for the interference compounds, the pH of each sample shall be adjusted, using sodium hydroxide, to 12.0 standard units. Each sample can then be composited into a larger container which has been chilled to 4 degrees Celsius, to allow for one analysis for the day. The permittee may elect to sample for cyanide prior to chlorination.

E. <u>Sludge (Biosolids) Management Requirements</u>

- The permittee shall comply with all existing federal and state laws and regulations that apply to its biosolids use or disposal practice.
 Additionally, the permittee shall ensure that the applicable requirements of 40 CFR 503 are met when the biosolids is used or disposed (refer to Appendix A).
- 2. The permittee shall handle and dispose of biosolids so the public health and the environment are protected from any reasonably anticipated adverse effects due to any toxic pollutants that may be present.
- 3. The Permittee shall ensure pollutants from the biosolids do not reach surface waters of the United States.
- 4. If the Permittee's biosolids are applied to the land, the Permittee is considered the person who applies biosolids for the purposes of determining compliance with the permit and compliance with the 40 CFR 503. This includes having records on actual agronomic loadings and on types of crops grown.

5. Class A or B biosolids applied to the land shall meet the requirements in Table 3:

TABLE 3: Requirements for Biosolids Applied to Land

Disposal Method	Product	Requirements
Land Application	Class A biosolids only	1. Pollutants: Ceiling Concentrations 503.13(a)(1) Monthly Average Concentrations 503.13(a)(2)(ii) ¹ 2. Pathogens:
		 40 CFR 503.32(b)² 3. Vector Control: 40 CFR 503.33(b)(1)³,
Land Application	Class B biosolids only	Ceiling Concentrations 503.13(a)(1) Monthly Average Concentrations 503.13(a)(2)(ii) ¹
		 2. Pathogens: 40 CFR 503.32(b)(3)³
		3. Vector Control: 40 CFR 503.33(b)(1) ³ ,

- 1. The permittee may use 40 CFR 503.13(a)(2)(i), Cumulative Loading Rates. The permittee must notify EPA, in writing, 30 days prior to switching methods
- 2. The permittee shall notify EPA and the state DEQ 30 days prior to using a Class A pathogen reduction method. Notification shall include the pathogen reduction method the permittee intends to use. If the permittee subsequently intends to use an alternate method, the EPA and the state DEQ must be notified at least 30 days prior to its use. Notification shall include a demonstration of the facility's ability to measure compliance with the alternative option. The city may begin using the new alternative 30 days after submittal of a complete process description unless notified otherwise by EPA.
- There are additional pathogen reduction and vector attraction reduction alternatives available in 40 CFR 503.32(b) and 40 CFR 503.33. If the permittee intends to use one of these alternatives, the EPA and the state DEQ must be notified at least 30 days prior to its use. Notification shall include a demonstration of the facility's ability to measure compliance with the alternative option. The city may begin using the new alternative 30 days after submittal of a complete process description unless notified otherwise by EPA.
 - 6. Biosolids may be distributed in the specific land application areas identified in Appendix B. Additional land application sites may be developed within Canyon County provided the following conditions are met:
 - a. An individual site plan shall be submitted to EPA 30 days prior to land applying biosolids to the new site. The site plan shall provide information on the site conditions and on the intended disposal practices at the site. The site plan shall be prepared in accordance

with the General Land Application Plan.

- b. The permittee shall evaluate each new site for the endangered species habitat(s), and report the findings in the individual site plan. The evaluation shall be conducted by a qualified biologist and/or botanist. The permittee shall notify EPA immediately if any habitat is found. Biosolids shall not be applied to land with endangered species habitat without written approval from EPA.
- c. Prior to land applying biosolids at a new site, the permittee shall notify interested parties by publishing a notice in the newspaper, and/or by mailing or delivering information packets to each interested party. Newspaper notices shall (1) direct readers to obtain copies of the site plan from the permittee or its representative, and (2) direct commenters to send their comments on the new land application site to:

U.S. Environmental Protection Agency 1200 Sixth Avenue, OW-130 Seattle, WA. 98103

Information packets shall include a copy of the site plan.

At a minimum, interested parties shall include: (1) Land owners and occupants of any land adjacent to or abutting the new land application site; (2) the local USDA Natural Resource Conservation Service; (3) the State Agricultural Extension Service; and (4) the local Soil Conservation District.

- 7. Any modification to the General Land Application Plan must be reviewed and approved by the DEQ.
- 8. Biosolids from the Caldwell facility may be sent to a municipal solid waste landfill (MSWLF) provided the biosolids are non-hazardous, and do not contain "free liquids" as defined by EPA test method 9095 in *Test Methods for Evaluating Solid Wastes Physical/Chemical Methods* (EPA Pub.No. SW-846).
- 9. The permittee may transfer Biosolids from the Caldwell Wastewater Treatment Facility to a processing facility that derives a material from the biosolids, provided the processing facility complies with the applicable provisions of 40 CFR 503. The permittee shall take reasonable steps to ensure they are transferring their biosolids to a facility that operates in compliance with the applicable provisions of 40 CFR 503. Steps taken shall be documented and made available to EPA upon request. The

- permittee shall provide the processing facility with information necessary to comply with 40 CFR 503 Subparts A, B, and D.
- 10. The permittee may receive biosolids from other facilities provided the Caldwell Wastewater Treatment Facility has the capacity to handle additional biosolids.
- 11. The permittee may distribute Class A or B biosolids in crop trials of two acres or less. Crop trials may occur outside the land application sites listed in Appendix B. Notification of planned crop trials shall be sent to (1) the Environmental Protection Agency, Idaho Operations Office (2) the Idaho Division of Environmental Quality, Southwest Regional Office, if required by the state, and (3) to the office of the Natural Resources Conservation Service of the U.S. Department of Agriculture closest to the crop trial site. Crop trials shall comply with all other requirements of the federal standards at 40 CFR 503 and the other requirements of this permit..
- 12. The permittee shall collect and analyze samples of biosolids that are applied to the land as follows:
 - a. The samples shall be representative of the variability in biosolids quality considering location, season, processing, and handling;
 - b. At a minimum, the biosolids shall be sampled in accordance with 40 CFR 503.16, but often enough to represent biosolids quality;
 - c. Samples shall be analyzed for the parameters listed in 40 CFR 503.13;
 - d. Sampling protocol shall follow procedures outlined in *Test Methods* for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, 2nd Edition (1982) with Updates I (April 1984) and II (April 1985) and 3rd Edition (November 1986) with Revision I (December 1987); and
 - e. Analytical protocols shall be in accordance with 40 CFR 503.8.
- 13. The permittee shall submit a report to EPA on February 19 of each year that includes the following information:
 - a. if the biosolids from the facility were stockpiled (no use or disposal), transferred to another facility, disposed in the municipal waste landfill unit, and/or land applied during the previous year;

- b. if the biosolids were received from another facility during the previous year;
- c. the location(s) biosolids were used or disposed (if applicable); and
- d. if the permittee land applied biosolids, provide the following information:
 - the concentration in the sewage biosolids of each pollutant listed in 40 CFR 503.13;
 - a description of how one of the vector attraction requirements in 40 CFR 503.33(b)(1) through (b)(8) is met;
 - a description of how the pathogen requirements in 40 CFR 503.32 are met:
 - the following certification statement by the person who prepares the bulk biosolids:

"I certify, under penalty of law, that the Class ___ [insert A or B, which ever is appropriate] pathogen requirements in 503.32 and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in 503.33(b)(1) through (b)(8) if one of those requirements is met] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements [and vector attraction reduction requirements if applicable] have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.";

- statement that appliers certifications under 40 CFR 503.17 were completed for all sites;
- units for reported concentrations;
- dry weight concentrations;
- number of samples collected during the monitoring period;
- number of excursions during the monitoring period;
- sample collection techniques; and
- analytical methods

F. Quality Assurance Requirements

1. The permittee shall develop a Quality Assurance Plan for all monitoring requirements identified in the permit (ambient, influent, effluent, and biosolids monitoring). The primary purpose of the Quality Assurance Plan shall be to assist in planning for the collection and analysis of samples in

support of the permit and in explaining data anomalies when they occur.

- 2. Throughout all sample collection and analysis activities, the permittee shall use the EPA approved quality assurance, quality control, and chain-of-custody procedures described in EPA QA/R-5 EPA Requirements for Quality Assurance Project Plans and EPA QA/G-5 Guidance on Quality Assurance Project Plans. The following references may be helpful in preparing the Quality Assurance Plan for this permit: You and Quality Assurance in Region 10, EPA, Region 10, Quality and Data Management Program, March 1988 and The Volunteer Monitors Guide to Quality Assurance Project Plans EPA 841-B-96-003, September 1996. The following references may be helpful for trace metal sampling: U.S. Environmental Protection Agency, Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, 1995, EPA-821-R-95-034, and U.S. Environmental Protection Agency, Sampling Ambient & Effluent Waters for Trace Metals, EPA-821-V-97-001.
- 3. The plan shall be submitted to EPA within 90 days of the effective date of this NPDES permit. The plan shall be implemented within 150 days of the effective date of this NPDES permit.
- 4. At a minimum the plan shall include the following:
 - Sampling techniques (field blanks, replicates, duplicates, control samples, etc).
 - Sampling preservation methods.
 - Sampling shipment procedures.
 - Instrument calibration procedures and preventive maintenance (frequency, standard, spare parts).
 - Qualification and training of personnel.
 - Analytical methods (including quality control checks, quantification/detection levels).
 - Analytical test method that will be used to achieve the method detection limits in Section I.B.5.
- 5. Name(s), address(es) and telephone number(s) of the laboratories, used by or proposed to be used by the permittee, shall be specified in the Quality Assurance Plan.
- 6. The permittee shall require the laboratory director of each laboratory providing measurement results in support of this permit to sign and submit to EPA the following statement on a monthly basis with the DMR:

I certify that this data is in compliance with requirements under 40 CFR §136 and other

analytical requirements specified in NPDES permit No. ID-002150-4.

Signature: Date:

G. Schedule of Compliance

1. The permittee shall achieve compliance with the following schedule for facility upgrade:

December 31, 1999	Complete construction and start-up of nitrification facilities.
January 1, 2000	Begin design of UV disinfection facilities
July 1, 2000	Begin construction of UV disinfection facilities
June 30, 2001	Complete construction of UV disinfection facilities
June 30, 2001	Final construction progress report

2. Reporting. The permittee shall submit an annual Report of Progress which outlines the progress made towards reaching the compliance dates listed above. The annual report shall include an assessment of the previous year of chlorine and ammonia data, a report on progress made towards meeting the final limitations, and milestones targeted for the upcoming year. The annual Report of Progress shall be submitted with the January Discharge Monitoring Report (DMR). The first report is due with the January 1999 DMR and annually thereafter, until compliance with the effluent limits is achieved.

H. <u>Design Criteria Requirements</u>.

The design criteria for the permitted facility is as follows:

Design Criteria					
Criteria	Value	Units			
Average Flow	8.48	mgd			
Influent BOD₅ Loading	17,600	lbs/day			
Influent TSS Loading	14,750	lbs/day			

Each month, the permittee shall compute an annual average value for flow, and BOD_5 and TSS loading entering the facility based on the previous twelve months data or all data available, whichever is less. If the facility performs plant upgrades that affect design criteria listed in the table, only data collected after the upgrade should be used in determining the annual average value. When the average annual values exceed 85% of the design criteria values listed in the table, the permittee shall develop a facility plan and schedule within one year from the date of first exceedence. The plan must include the permittee's strategy for continuing to maintain compliance with effluent limits; the schedule must outline the steps the permittee will take in order to maintain compliance. The plan and schedule will be made available to the Director or authorized representative upon request.

I. Definitions.

- 1. "Agronomic rate" is the whole sludge (biosolids) application rate (dry weight basis) designed: (1) to provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land and (2) to minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.
- 2. "Annual Average" means the sum of all values reported in a twelve month period divided by the number of values.
- 3. "Application Site or Land Application Site" means all contiguous areas of a users' property intended for biosolids application.
- 4. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
- 5. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
- 6. "Biosolids" means any sewage sludge or material derived from sewage sludge
- 7. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- 8. "Chronic toxicity" measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to effluent or ambient water compared to that of the control organism.

- 9. "Crop trial" means applying biosolids as a soil amendment on an area of land two (2) acres or less for the purpose of developing appropriate agricultural practices.
- 10. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 11. A "grab" sample, for monitoring requirements, is a single "dip and take" sample or measurement taken at a specific time or over as short a period of time as is feasible.
- 12. General Land Application Plan (GLAP)", for the purposes of this permit, means the amended sludge permit application submitted by the City of Caldwell, and received by EPA on November 23, 1998.
- 13. "Interim Minimum Level" is a "calculated" Minimum Level. It is calculated whenever a method-specified minimum level does not exist. It is equal to 3.18 times the method-specified method detection limit rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc.
- 14. "Land Application" is the spraying or spreading of biosolids onto the land surface; the injection of biosolids below the land surface; or the incorporation of biosolids into the land so that the biosolids can either condition the soil or fertilize crops or vegetation grown in the soil. Land application includes distribution and marketing (i.e., the selling or giving away of the biosolids).
- 15. "Local Limits" are specific limits to implement the general and specific prohibitions in 40 CFR §403.5 (a) and (b).
- 16. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
- 17. "Minimum Level" (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is 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. Quantifying measurements below the ML requires extrapolation of the calibration relationship below the range of data used to establish the calibration. Such an extrapolation is not a preferred practice and leads to greater uncertainty in the quantitative result.
- 18. "No Observed Effect Concentration" (NOEC) is the highest concentration of

toxicant to which organisms are exposed in a full life-cycle or partial life-cycle test, that causes no observable adverse effects on the test organisms (i.e., the highest concentration of toxicant in which the values for the observed responses are not statistically significantly different form the controls).

- 19. "Pathogen" means an organism that is capable of producing an infection or disease in a susceptible host.
- 20. "Pollutant" for the purposes of this permit is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food-chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.
- 21. "Runoff" is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off of the land surface.
- 22. "Sewage Sludge" means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage and/or a combination of domestic sewage and industrial waste of a liquid nature in a Treatment Works. Sewage sludge (biosolids) includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from biosolids. Biosolids does not include ash generated during the incineration of biosolids or grit and screenings generated during preliminary treatment of domestic sewage in a Treatment Works. These must be disposed of in accordance with 40 CFR 258.
- 23. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 24. A "24-hour composite" sample shall mean a flow-proportioned mixture of not less than 8 discrete aliquots. Each aliquot shall be a grab sample of not less than 100 ml and shall be collected and stored in accordance with procedures prescribed in the most recent edition of <u>Standard Methods for the Examination of Water and Wastewater</u>.
- 25. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations

because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

26. "Vector Attraction" is the characteristic of biosolids that attracts rodents, flies, mosquitos or other organisms capable of transporting infectious agents.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling.

- 1. Effluent samples taken in compliance with the monitoring requirements established under Part I shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.
- 2. Biosolids samples used to measure compliance with Part I of this permit shall be collected at location representative of the quality of biosolids generated at the treatment works and immediately prior to land application.
- B. <u>Monitoring Procedures</u>. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- C. Reporting of Monitoring Results. Monitoring results shall be summarized each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1). The reports shall be submitted monthly and are to be postmarked by the 10th day of the following month. Legible copies of these, and all other reports, shall be signed and certified in accordance with the requirements of Part IV.J., Signatory Requirements, and submitted to the Director, Office of Water and the State agency at the following addresses:

original to: United States Environmental Protection Agency (EPA) Region 10

1200 Sixth Avenue, OW-133 Seattle, Washington 98101

copy to: Division of Environmental Quality (DEQ)

1445 North Orchard Boise, Idaho 83706

D. <u>Pretreatment Report</u>. The permittee shall provide to the U.S. Environmental Protection Agency Region 10 an annual report that describes the permittee's program activities over the October to September report year. One copy of this report shall be submitted to the following address no later than November 1 of each year:

Pretreatment Coordinator U.S. Environmental Protection Agency (EPA) Region 10 1200 Sixth Avenue, OW-130 Seattle, WA 98101

and shall include:

- 1. An updated non-domestic user inventory, including those facilities that are no longer discharging (with explanation), and with new dischargers appropriately categorized and characterized. Categorical users should have the applicable category noted as well as cases where more stringent local limits apply instead of the categorical standard.
- 2. Results of wastewater sampling at the treatment plants as specified in Part I.D. In addition, the permittee shall calculate removal rates for each pollutant for each sample date and discuss whether existing local limits contained in the permittee's ordinance continue to be appropriate to prevent treatment plant interference and pass through of pollutants that could affect water quality or preclude beneficial uses of the biosolids. A comparison of the influent levels with the maximum allowable headworks loading used in the most recent local limits evaluation shall be included in the report.
- 3. Status of program implementation activities including:
 - a. Any planned modifications to the pretreatment program originally approved by the U.S. Environmental Protection Agency, including staffing and funding updates.
 - b. Any interference, upset, or NPDES permit violations experienced at the POTW which were directly or indirectly attributable to non-domestic users including:
 - 1. Date & time of the incident
 - 2. Description of the effect on the POTW's operation
 - 3. Effects on the POTW's effluent and biosolids quality
 - 4. Identification of suspected or known sources of the discharge causing the upset
 - 5. Steps taken to remedy the situation and to prevent recurrence
 - c. Listing of non-domestic users inspected and/or monitored during the year with a summary of results.
 - d. Listing of non-domestic users planned for inspection and/or monitoring for the coming year along with associated frequencies.
 - e. Listing of non-domestic users notified of promulgated pretreatment standards and/or local standards, as required in 40 CFR §403.8(f)(2)(iii).
 - f. Listing of non-domestic users whose permits have been issued, reissued or

- modified along with current permit expiration dates.
- g. Listing of non-domestic users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include the final date of compliance for each facility.
- 4. Status of enforcement activities including:
 - a. Listing of non-domestic users who violated applicable pretreatment standards or requirements, a summary of the violation(s), the enforcement action taken or planned by the City, and the present compliance status as of the date of preparation of the pretreatment annual report.
 - b. Listing of non-domestic users in Significant non-compliance (SNC) as defined in 40 C.F.R. §403.8(f)(2)(vii). A copy of all SNC public notices in the newspaper should be included in the report.
- E. <u>Additional Monitoring by the Permittee</u>. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or Biosolids Report. Such increased frequency shall also be indicated.
- F. <u>Records Contents</u>. Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The individual(s) who performed the sampling or measurements;
 - 3. The date(s) analyses were performed;
 - 4. The individual(s) who performed the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. Data collected on-site, copies of Discharge Monitoring Reports, and a copy of this NPDES permit must be maintained on-site for five years or until a new NPDES permit is issued to the facility, whichever is longer.

H. Twenty-four Hour Notice of Noncompliance Reporting.

- 1. The following occurrences of noncompliance shall be reported by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G., Bypass of Treatment Facilities.);
 - c. Any upset which exceeds any effluent limitation in the permit (See <u>Part III.H.</u>, <u>Upset Conditions</u>.); or
 - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit to be reported within 24 hours.
- 2. The permittee shall report any noncompliance, including transportation accidents, spills, and uncontrolled runoff from biosolid transfer or land application sites which may seriously endanger health or the environment as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances. The report shall be made to the EPA, Region 10, Emergency Response Branch at (206) 553-1263.
- 3. The following occurrences of noncompliance with biosolids requirements shall be reported by telephone to the EPA, Region 10, NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1846 by the first workday (8:00 a.m. 4:30 p.m. PST) following the day the permittee became aware of the circumstances:
 - a. violation of any limits of 40 CFR 503.13, Table 1 (maximum individual sample) or Table 3 (monthly average);
 - b. the pathogen limits;
 - c. the vector attraction reduction limits; or
 - d. the management practices for biosolids that has been land applied.
- 4. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been

corrected; and

- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 5. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1846.
- 6. Reports shall be submitted to the addresses in <u>Part II.C.</u>, <u>Reporting of Monitoring Results.</u>
- I. <u>Other Noncompliance Reporting</u>. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.C. are submitted. The reports shall contain the information listed in Part II.H.4.
- J. <u>Inspection and Entry</u>. The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:
 - 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit including, but not limited to, biosolids treatment, collection, storage facilities or area, transport vehicles and containers, and land application sites; and
 - 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location including, but not limited to, digested biosolids before dewatering, dewatered biosolids, biosolids transfer or staging areas, any ground or surface waters at the land application sites, or biosolids, soils, or vegetation on the land application sites.
 - 5. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, so that the Director, or authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, will be permitted to enter without delay for the purposes of performing their responsibilities.

K. <u>Compliance Schedules</u>. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit (Part I) shall be submitted no later than 10 days following each schedule date.

III. COMPLIANCE RESPONSIBILITIES

A. <u>Duty to Comply</u>. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

B. <u>Penalties for Violations of Permit Conditions.</u>

1. Civil Penalty. The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil penalty, not to exceed \$27,500 per day for each violation.

2. Criminal Penalties:

- a. Negligent Violations. The Act provides that any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act; or negligently introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have known could cause personal injury or property damage or, other than in compliance with all applicable federal, state, or local requirements or permits, which causes such treatment works to violate any effluent limitation or condition in a permit issued to the treatment works under Section 402 of this Act; shall be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or by both.
- b. Knowing Violations. The Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act; or knowingly introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have known could cause personal injury or property damage or, other than in compliance with all applicable federal, state, or local requirements or permits, which causes such treatment works to violate any effluent limitation or condition in a permit issued to the treatment works under Section 402 of this Act; shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.
- c. Knowing Endangerment. The Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or

405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this subparagraph, be subject to a fine of not more than \$1,000,000.

d. False Statements. The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall upon conviction, be punished by a fine of not more that \$10,000, or by imprisonment for not more than 2 years, or by both.

Except as provided in permit conditions in <u>Part III.G.</u>, <u>Bypass of Treatment Facilities</u> and <u>Part III.H.</u>, <u>Upset Conditions</u>, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

- C. <u>Need to Halt or Reduce Activity not a Defense</u>. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. <u>Duty to Mitigate</u>. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. <u>Proper Operation and Maintenance</u>. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. <u>Removed Substances</u>. Collected screenings, grit, solids, biosolids, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.
- G. <u>Bypass of Treatment Facilities</u>:
 - 1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.

2. Notice:

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under <u>Part II.H., Twenty-four Hour Notice of Noncompliance Reporting</u>.

3. Prohibition of bypass.

- a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under paragraph 2 of this section.
- b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a. of this section.

H. Upset Conditions.

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- 2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;

- b. The permitted facility was at the time being properly operated;
- c. The permittee submitted notice of the upset as required under <u>Part II.H.</u>, <u>Twenty-four Hour Notice of Noncompliance Reporting</u>; and
- d. The permittee complied with any remedial measures required under <u>Part III.D.</u>, <u>Duty to Mitigate</u>.
- 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Pretreatment Program Requirements.

- 1. The permittee shall implement its Pretreatment Program in accordance with the legal authorities, policies, procedures, staffing levels and financial provisions described in its original approved pretreatment program submission entitled: Pretreatment Program for the City of Caldwell, Idaho, dated March 1983 and amended by a Sewer Use and Management Ordinance approved by EPA on November 16, 1993, and the General Pretreatment Regulations (40 CFR 403) including any amendments thereafter. At a minimum, the following pretreatment implementation activities shall be undertaken by the permittee:
 - a. Enforce categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Act, prohibitive discharge standards as set forth in 40 CFR 403.5 or local limitations developed by the permittee in accordance with 40 CFR 403.5 (c), whichever are more stringent or are applicable to non-domestic users discharging wastewater into the permittee's collection system. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Act and shall not be limited to categorical industrial facilities.
 - b. Implement and enforce the requirements of the most recent and effective portions of local law and regulations (e.g. municipal code, sewer use ordinance) addressing the regulation of non-domestic users.
 - c. Update its inventory of non-domestic users at a frequency and diligence adequate to ensure proper identification of non-domestic users subject to pretreatment standards, but no less than once per year. The permittee shall notify these users of applicable pretreatment standards in accordance with 40 CFR 403.8 (f) (2) (iii).
 - d. Issue, reissue and modify, in a timely manner, industrial wastewater discharge permits to at least all Significant Industrial Users (SIUs). These documents shall contain, at a minimum, conditions identified in 40 CFR 403.8 (f)(1)(iii). The permittee shall follow the methods described in its implementation procedures for issuance of individual permits.

- e. Develop and maintain a data management system designed to track the status of the permittee's non-domestic user inventory, non-domestic user discharge characteristics, and their compliance with applicable pretreatment standards and requirements. In accordance with 40 CFR 403.12 (o), the permittee shall retain all records relating to its pretreatment program activities for a minimum of three (3) years and shall make such records available to the EPA upon request. The permittee shall also provide public access to information considered effluent data under 40 CFR Part 2.
- f. Establish, where necessary, contracts or legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by non-domestic users within these jurisdictions. These contracts or agreements shall identify the agency responsible for the various implementation and enforcement activities to be performed in the contributing jurisdiction. In addition, the permittee may be required to develop a Memorandum of Understanding (Agreement) that outlines the specific roles, responsibilities and pretreatment activities of each jurisdiction.
- g. Carry out inspections, surveillance, and monitoring of non-domestic users to determine compliance with applicable pretreatment standards and requirements. A thorough inspection of SIU(s) shall be conducted at least annually. Frequency of wastewater sampling for the SIU(s) shall be commensurate with the character and volume of the wastewater, but shall not be less than two (2) times per year. Sample collection and analysis shall be performed in accordance with 40 CFR 403.12 (b)(5)(ii) through (v) and 40 CFR 136.
- h. Enforce and obtain remedies for non-compliance by any non-domestic user with applicable pretreatment standards and requirements. This shall include timely and appropriate reviews of industrial reports to identify all violations of the user's permit or the permittee's local ordinance. Once violations have been uncovered, the permittee shall take timely and appropriate action to address the noncompliance. The permittee's enforcement actions shall comply with its approved enforcement response procedures.
- i. Publish, at least annually in the largest daily newspaper in the permittee's service area, a list of all non-domestic users which, at any time in the previous 12 months, were in Significant Non-Compliance as defined in 40 CFR 403.8 (f)(2)(vii).
- j. Maintain adequate staff, funds and equipment to implement its pretreatment program.
- 2. The permittee shall implement an accidental spill prevention program to reduce and prevent spills and slug discharges of pollutants from non-domestic users.
- 3. If the permittee elects to conduct all the non-domestic user monitoring in lieu of requiring

self-monitoring by its SIUs, the permittee shall conduct sampling, monitoring and analyses for all regulated pollutants in accordance with 40 CFR 403.12 (b)(5)(ii) through (v), 40 CFR 403.12 (g) and 40 CFR 136. The frequency of sampling shall be commensurate with the character and volume of the discharge and shall provide the permittee with ample data to determine compliance, but in no case shall sampling be less than 2 times a year spaced at six (6) month intervals.

- 4. Whenever, on the basis of information provided to the U.S. Environmental Protection Agency, it has been determined that any source contributes pollutants to the permittee's treatment works in violation of subsection (b), (c), or (d) of Section 307 of the Act, notification shall be provided to the permittee. Failure by the permittee to commence an appropriate enforcement action within 30 days of this notification may result in appropriate enforcement action by the EPA against the source and permittee.
- 5. If the permittee elects to modify any components of its pretreatment program, it shall comply with the requirements of 40 CFR 403.18. No substantial program modification may be implemented prior to receiving written authorization from EPA.
- 6. Sampling See Part I.D.
- 7. Reporting See Part II.D.

IV. GENERAL REQUIREMENTS

- A. <u>Notice of New Introduction of Pollutants</u>. The permittee shall provide adequate notice to the Director, Office of Water of :
 - 1. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and
 - 2. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.
 - 3. For the purposes of this section, adequate notice shall include information on:
 - a. The quality and quantity of effluent to be introduced into such treatment works; and
 - b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.
- B. <u>Control of Undesirable Pollutants</u>. Under no circumstances shall the permittee allow introduction of the following wastes into the waste treatment system:

- 1. Wastes which will create a fire or explosion hazard in the treatment works;
- 2. Wastes which will cause corrosive structural damage to the treatment works, but in no case, wastes with a pH lower than 5.0, unless the works is designed to accommodate such wastes;
- 3. Solid or viscous substances in amounts which cause obstructions to the flow in sewers, or interference with the proper operation of the treatment works;
- 4. Wastewaters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency; and
- 5. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge of such volume or strength as to cause interference in the treatment works.
- C. <u>Requirements for Industrial Users</u>. The permittee shall require any industrial user of these treatment works to comply with any applicable requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.
- D. <u>Planned Changes</u>. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.
- E. <u>Anticipated Noncompliance</u>. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- F. <u>Permit Actions</u>. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- G. <u>Duty to Reapply</u>. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.
- H. <u>Duty to Provide Information</u>. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

- I. <u>Other Information</u>. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.
- J. <u>Signatory Requirements</u>. All applications, reports or information submitted to the Director shall be signed and certified.
 - 1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
 - 2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Director, and
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
 - 3. Changes to authorization. If an authorization under paragraph IV.J.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph IV.J.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
 - 4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

K. <u>Availability of Reports</u>. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Director. As required

by the Act, permit applications, permits and effluent data shall not be considered confidential.

- L. <u>Oil and Hazardous Substance Liability</u>. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.
- M. <u>Property Rights</u>. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- N. <u>Severability</u>. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- O. <u>Transfers</u>. This permit may be automatically transferred to a new permittee if:
 - 1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date:
 - 2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- P. <u>State Laws</u>. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

Q. Reopener Provision.

- 1. This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, as amended, if the effluent standard, limitation, or requirement so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit; or
 - b. Controls any pollutant or disposal method not addressed in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the CWA then applicable.

- 2. This permit may be reopened to adjust any effluent limitations if future water quality studies, waste load allocation determinations, or changes in water quality standards warrant the establishment of different requirements.
- 3. This permit may be reopened and modified to include the appropriate biosolids limitations (and compliance schedule, if necessary), management practices, other appropriate requirements to protect public health and the environment, or if there have been substantial changes (or such changes are planned) in biosolids use or disposal practices; applicable management practices or numerical limitations for pollutants in biosolids have been promulgated which are more stringent than the requirements in this permit; and/or it has been determined that the permittee's biosolids use or land application practices do not comply with existing applicable state or federal regulations.

APPENDIX A Part 503 Regulations

1. <u>Subpart A - General Provisions</u>.

- 503.1 Purpose and applicability
- 503.2 Compliance period
- 503.3 Permits and direct enforceability
- 503.4 Relationship to other regulations
- 503.5 Additional or more stringent requirements
- 503.6 Exclusions
- 503.7 Requirement for a person who prepares sewage sludge
- 503.8 Sampling and analysis

2. <u>Subpart B - Land Application</u>.

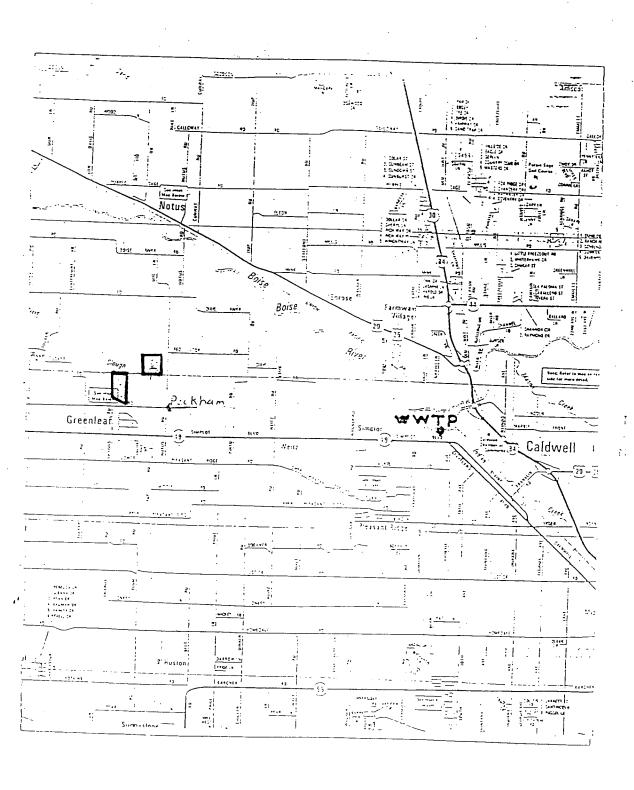
Subpart B Requirements Applicable to Generators, Preparers, or Appliers*				
	Generator or Preparer Applier			
General requirements	503.12(d) 503.12(f) 503.12(g) 503.12(i)	503.12(a) 503.12(b) 503.12(e) 503.12(h) 503.12(j)		
Pollutant limits	503.13(b)(1), (b)(3), or (b)(4)	503.13(b)(2)		
Management practices	503.14(e)	503.14(a) 503.14(b) 503.14(c) 503.14(d)		
Operational standards	503.15(a) pathogens 503.33(b)(1-8) vector attraction reduction	503.32(b)(5) site restrictions for Class B sewage sludge 503.33(b)(9 & 10) vector attraction reduction		
Monitoring	503.16(a)			

	503.17(a)(1)			
5	503.17(a)(2) 503.17(a)(3)(i) 503.17(a)(4)(i)	exceptional quality sewage sludge exceptional quality sewage sludge derived material sewage sludge subject to pollutant concentration limits, Class A, and vector attraction reduction in §503.33(b)(9) or §503.33(b)(10) sewage sludge subject to pollutant concentration limits and Class B sewage sludge subject to cumulative pollutant loading rates sewage sludge subject to annual pollutant	503.17(a)(4)(ii)	sewage sludge subject to pollutant concentration limits, Class A, and vector attraction reduction in §503.33(b)(9) or §503.33(b)(10) sewage sludge subject to pollutant concentration limits and Class B sewage sludge subject to cumulative loading rates
Reporting 5	503.18	loading rates	503.18	

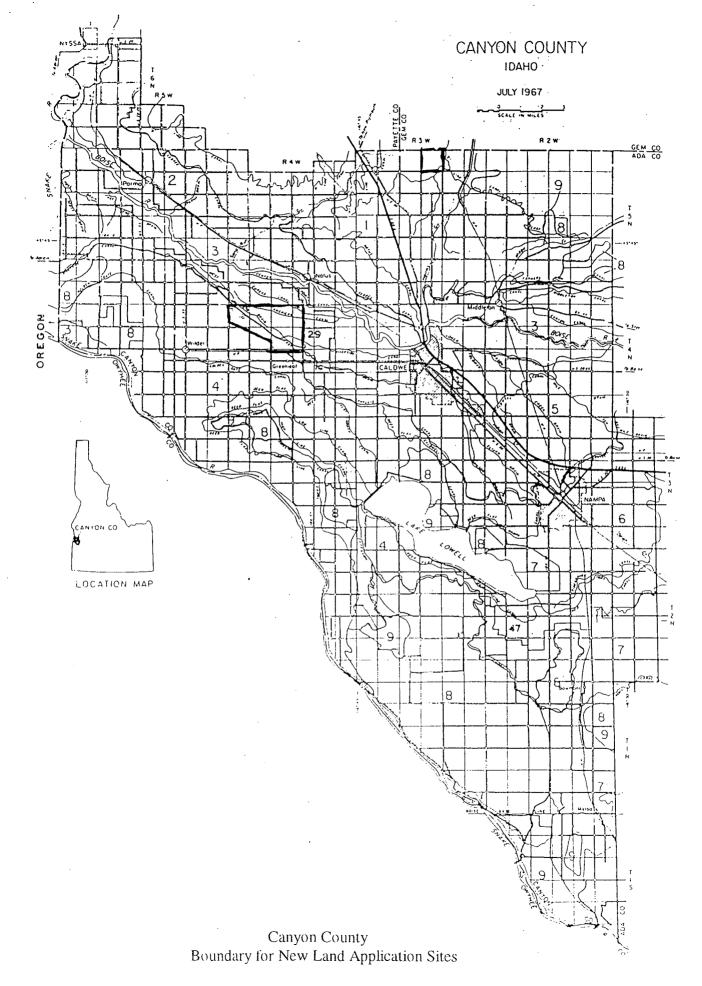
3. <u>Subpart D - Pathogens and Vector Attraction Reduction.</u>

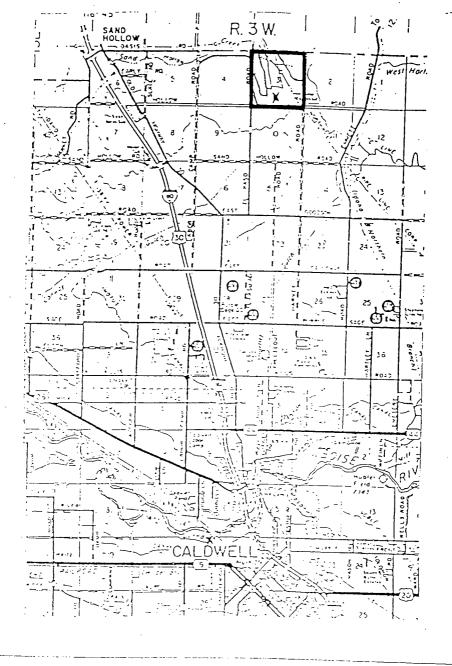
503.32	Pathogens, Sewage sludge
503.33	Vector attraction reduction

APPENDIX B Land Application Maps



General Boundary of Land Application Sites (Boundaries are represented by dark lines)





General Boundary of Land Application Sites (Boundaries are represented by dark lines)