

# CITY OF IDAHO CITY



## REGULAR CITY COUNCIL MEETING

Wednesday, July 26, 2023

6:00 P.M.

City Hall, 511 Main Street, Idaho City, ID 83631

Join Zoom Meeting

<https://us02web.zoom.us/j/4192717240?pwd=UWJUeHFidm5GMUliNUhFNkJKHaUZ2OT09>

Meeting ID: 419 271 7240

Passcode: iccouncil

### CALL MEETING TO ORDER ROLL CALL PLEDGE OF ALLEGIANCE

#### I. CONSENT AGENDA

The consent calendar includes items which require formal Council action, but which are typically routine or not of great controversy. Individual Council members may ask that any specific item be removed from the consent calendar in-order that it is discussed in greater detail. Explanatory information is included in the Council agenda packet regarding these items and any contingencies are part of the approval.

- A. APPROVAL OF MINUTES: JULY 12, 2023 **ACTION ITEM**
- B. IDAHO CITY EVENT CHECKLIST: **ACTION ITEM**
- C. BILLS/PAYABLES: JULY 13, 2023 THROUGH JULY 26, 2023 **ACTION ITEM**

#### II. PUBLIC HEARINGS

Items listed as public hearings allow citizen comment on the subject matter before the Council. Residents or visitors wishing to comment upon the item before the Council should follow the procedural steps. In order to testify, individuals must sign up in advance, providing sufficient information to allow the Clerk to properly record their testimony in the official record of the City Council. Hearing procedures call for presentation by the applicant, submission of information from City staff, followed by public testimony. **ACTION ITEM**

#### III. ENGINEER'S REPORT

- A. 2023 UPDATED PLAN OF OPERATIONS. **ACTION ITEM**
- B. QUALITY ASSURANCE PROJECT PLAN (QAPP). **ACTION ITEM**

#### IV. EXECUTIVE SESSION

Certain City-related matters may need to be discussed confidentially as a matter of law subject to applicable legal requirements; the Council may enter executive session to discuss such matters. **ACTION ITEM**

- A. I.C. SECTIONS 74-206(F) AND 74-206(C) TO DISCUSS CONTROVERSIES IMMINENTLY LIKELY TO BE LITIGATED AND TO DISCUSS ACQUISITION OF AN INTEREST IN REAL PROPERTY NOT OWNED BY THE CITY.

#### V. ORDINANCES AND RESOLUTIONS

Ordinances and resolutions are formal measures considered by the City Council to implement policy which the Council has considered. Resolutions govern internal matters to establish fees and charges pursuant to existing ordinances. Ordinances are laws which govern general public conduct. Certain procedures must be followed in the adoption of both ordinances and resolutions; state law often establishes those requirements. **ACTION ITEM**

- A. ORDINANCE FOR WATER AND SEWER CONNECTIONS FOR NEW CONSTRUCTION
- B. ORDINANCE NO 378 CITY COUNCIL MEETINGS (MEETING TIME)
- C. RESOLUTION 2023-09 WATER BANK LEASE - BOISE RIVER RENTAL POOL LEASE AGREEMENT FOR 2023

VI. OLD BUSINESS

- A. PUBLIC ROAD/RIGHT-OF-WAY STATUS OF MYERS STREET. **ACTION ITEM**

VII. NEW BUSINESS

- A. BOISE RIVER RENTAL POOL LEASE AGREEMENT FOR 2023. **ACTION ITEM**
- B. LETTER OF INTENT FROM BARBARA MCCLAIN – IDAHO CITY HISTORIC PRESERVATION COMMISSION. **ACTION ITEM**
- C. LETTER OF INTENT FROM KAY JACKSON – IDAHO CITY HISTORIC PRESERVATION COMMISSION. **ACTION ITEM**
- D. ACQUISITION OF FUTURE WATER RIGHTS THROUGH ANNEXATION TO DISTRICT OR LEASING **ACTION ITEM**

VIII. COMMITTEE REPORTS

- A. PARKS & RECREATION COMMISSION
- B. HISTORIC PRESERVATION COMMISSION
- C. PLANNING & ZONING COMMISSION
- D. IDAHO CITY CHAMBER OF COMMERCE

IX. EXECUTIVE SESSION

Certain City-related matters may need to be discussed confidentially as a matter of law subject to applicable legal requirements; the Council may enter executive session to discuss such matters. **ACTION ITEM**

- A. I.C. SECTION 74-206(1)(b) CONSIDER PERSONNEL MATTERS

X. EMPLOYEE UPDATES

- A. PUBLIC WORKS
- B. LAW ENFORCEMENT
- C. CLERK/TREASURER'S OFFICE
  - 1. WATER AND SEWER UPDATES **ACTION ITEM**
  - 2. OVERDUE UTILITIES BILLS FOR ELEMENT CONSTRUCTION **ACTION ITEM**
  - 3. STEVEN GREEN WATER BILL LATE FEES & USAGE CHARGES

- D. CITY ATTORNEY

XI. COUNCIL UPDATES

XII. MAYOR UPDATES

XIII. CITIZEN COMMENTS

This section of the agenda is reserved for citizens wishing to address the Council regarding City-related issues that are not on the agenda. To ensure adequate public notice, Idaho Law provides that any item requiring Council action must be placed on the agenda of an upcoming Council meeting, except for emergency circumstances. Comments related to future public hearings should be held for that public hearing. Repeated comments regarding the same or similar topics previously addressed are out of order and will not be allowed. Persons wishing to speak will have 5 minutes. Comments regarding performance by city employees are inappropriate at this time and should be directed to the mayor, either by subsequent appointment or after tonight's meeting, if time permitting.

ADJOURNMENT

Questions concerning items appearing on this Agenda or requests for accommodation of special needs to participate in the meeting should be addressed to the Office of the City Clerk, 511 Main Street or call 208-392-4584.

<b>Mayor:</b> Ken Everhart <a href="mailto:idahocitymayor1@cityvofic.org">idahocitymayor1@cityvofic.org</a>	<b>Chief of Police:</b> Mark Otter <a href="mailto:icpd100@cityvofic.org">icpd100@cityvofic.org</a>	<b>Public Works Director:</b> Tami Claus <a href="mailto:idahocitypublicworks@cityvofic.org">idahocitypublicworks@cityvofic.org</a>	<b>City Clerk-Treasurer:</b> Nancy L Ptak <a href="mailto:idahocityclerk@cityvofic.org">idahocityclerk@cityvofic.org</a>	511 Main Street PO Box 130 Idaho City, ID 83631 (208)392-4584
<b>Council members:</b> Tom Secor Jr Ashley M Elliott Mari Adams Ryan Heffington	<b>City officers:</b> Brent Watson	<b>Public Works:</b> Nick Mancera Dallas DeCory	<b>Deputy Clerk:</b> Kaleb Goodlett <a href="mailto:idahocityoffice@cityvofic.org">idahocityoffice@cityvofic.org</a>	(208)392-4584 operating hours Monday- Thursday 8 am - 5 pm Friday 9am -3pm
			<b>Utility Billing Clerk:</b> Sue Robinson <a href="mailto:4cityfolk@cityvofic.org">4cityfolk@cityvofic.org</a>	Friday 9am -3pm



# CITY OF IDAHO CITY



## REGULAR CITY COUNCIL MEETING

Wednesday, July 12, 2023

6:00 P.M

City Hall, 511 Main Street, Idaho City, ID 83631

### Join Zoom Meeting

<https://us02web.zoom.us/j/4192717240?pwd=UWJJeHFjdm5GMUliNUhFNkJKHaUZ2QT09>

Meeting ID: 419 271 7240

Passcode: iccouncil

**CALL MEETING TO ORDER:** Mayor Everhart called regular city council meeting to order at 6:01 PM

**ROLL CALL:** Clerk Ptak called roll, Heffington, Adams, Secor in attendance, Elliott absent. Elliott attended at 6:05

**PLEDGE OF ALLEGIANCE:** Mayor Everhart led the pledge of allegiance.

Council President Secor made a motion, seconded by Adams, to amend the agenda to add the Mountain Waterworks Task order No. 294-08 as an action item so the emergency work can proceed. Heffington aye. Adams aye. Secor aye. Motion carried.

Mayor Everhart addressed the citizens in attendance that would like to address the council regarding a previous issue that happened in town. Mayor Everhart moved the citizen comments to the beginning of the agenda to allow them to speak. (See citizen comments below in **BOLD**)

## I. CONSENT AGENDA

The consent calendar includes items which require formal Council action, but which are typically routine or not of great controversy. Individual Council members may ask that any specific item be removed from the consent calendar in order that it is discussed in greater detail. Explanatory information is included in the Council agenda packet regarding these items and any contingencies are part of the approval.

### A. APPROVAL OF MINUTES: JUNE 28, 2023 **ACTION ITEM**

Council President Secor made a motion, seconded by Adams, to approve the minutes dated June 28, 2023. 4 ayes. Motion carried

### B. IDAHO CITY EVENT CHECKLIST: **ACTION ITEM**

#### 1. JACK PINE ROUNDUP – AUGUST 25 & 26, 2023

Mayor Everhart explained that he had a brief talk with Chief Otter who has not seen the Event Checklist to do his approval. Mayor Everhart suggested moving this item to next meeting to allow time for Chief Otter to go over the Event and get all the details. Item moved to the next agenda.

### C. BILLS/PAYABLES: JUNE 29, 2023 THROUGH JULY 12, 2023 **ACTION ITEM**

Council President Secor made a motion, seconded by Adams, to pay bills dated June 29, 2023, through July 12, 2023, in the amount of \$9,160.75. 4 ayes. Motion carried

## II. PUBLIC HEARINGS

Items listed as public hearings allow citizen comment on the subject matter before the Council. Residents or visitors wishing to comment upon the item before the Council should follow the procedural steps. In order to testify, individuals must sign up in advance, providing sufficient information to allow the Clerk to properly record their testimony in the official record of the City Council. Hearing procedures call for presentation by the applicant, submission of information from City staff, followed by public testimony. **ACTION ITEM**

### A. PUBLIC HEARING FOR PUBLIC USE OF MYERS STREET

Council President Secor made a motion, seconded by Elliott, to open the public hearing for public use of Myers Street. Secor aye, Adams aye, Elliott aye, Heffington aye. Public hearing opened at 6:17. Mayor Everhart explained that the city wanted to allow the citizens a chance to voice the validity of the use of Myers Street up to Hill Rd. as a public thoroughfare.

Connie Runia, Trudy Jacksons attorney addressed council and explained this issue came up because Trudy had questions with some encroachments to her property. After having a survey done it showed there were in fact encroachments to Jacksons property. Runia had submitted written comments with pictures, etc. and further explained it is not Jacksons desire to instigate or bring litigation to the city. A letter that was sent in January was meant to draw attention and ask for a conversation to resolve issues. Runia asked the city to reconsider the response to the January letter and engage in a way to resolve the issue. Runia then asked council if they had any questions for her. Heffington no questions. Elliott asked when Jackson purchased the properties and Runia responded one in 2006 and the other in 2011. Adams no questions, Secor no questions. Mayor Everhart's only comment is the he has lived here permanently since 1999 and Myers Street has been there and in use since then. He had no idea until this issue came up that Myers was not a platted road because it shows on all the maps, etc. Mayor Everhart added that the city does not want litigation either, but to his knowledge the road has always been an active in use road. The city plows the snow, does some maintenance, and there are city utilities that run under Myers as well.

**Brenda Secor** explained that she has been married to her husband for 28 years and Myers has always been there. If discussing Myers St and private property then another neighbor (Hinz) should be discussed because the Jacksons use his property to access theirs.

**Buzz Armfield** explained that he used to own 203 Myers, and if Myers were closed it would virtually eliminate access to that property. During the winter, the property had to be accessed from Hill Rd. coming down Myers. Armfield had been on the property since 1993 and there was not much maintenance done in the 3 years he lived there. Armfield added that on surveys he had done it showed Myers as an old stage road and has been there quite some time.

**Ted Jewell** explained that he would like to see the road stay open, it is one of the 2 ways he gets home. Jewell explained that he would like to see it connected to a trail system. Mayor Everhart asked Jewell to please keep comments to the current road and usage, not future potential plans.

**Bryce Jackson** explained that Myers is not used or maintained much. Walulla gets more traffic and is in worse shape than Myers. Jackson explained that instead of potential litigation the city could put that money to use in other road maintenance.

**Mayor Everhart** read aloud all of the letters that were submitted. Barbara McClain's letter was for closing the portion of Myers on Trudy Jacksons property. Dave Selene's letter was for keeping Myers Street open. Seward family letter was for keeping Myers open due to the fact that if closed it would make access to their property impossible. Trudy Jacksons written comments explained her history in Idaho City and her issues with Myers Street. It crosses both properties going up to Hill Rd. and over the years she has noticed a gradual widening of the road. After having her properties surveyed encroachments were verified from driveways being cut across her property. The written comments further explained how Jackson is damaged by the roadway and that she is asking the city to withdraw its claim to the extension of Myers St.

**Clerk Ptak** added that all of the information read is on the city's website under packets.

**Trudy Jackson** explained the comment that Brenda Secor made addressing the Hinz property. Jackson had attempted to purchase the property from Hinz, but he would not sell it. Hinz allowed her to use that area as needed. Jackson explained the traffic issues with Hill Rd. and the other traffic coming up Myers. Jackson further explained that she had asked Seward to survey his lot line so they could come to an agreement on the road, and while Jackson was out of town Seward had a contractor put in a driveway the cut into Jackson property. If the city were to close the section of Myers Jackson would ensure the other property owners could access their driveways. Jackson had asked Terry Teeter if Myers were an option for fire trucks and his response was that they would just run hose line if needed. Discussion on traffic on Myers and Hill ensued. Elliott asked when Jackson had the surveys recorded and Jackson responded 2-3 weeks ago. Jackson expressed her frustration with the city for not responding to these issues sooner. Mayor Everhart responded that the city only has a couple of meetings a month and does its best to get to all of the issues but had conversations with the city attorney on what route should be taken with the issue. The city wants to resolve the issue but there are other things to consider. Discussion on snow, plowing, etc. ensued. Mayor Everhart added that he is willing to sit down and have a conversation.

**City Attorney Callahan** added that the city is limited on options for discussions because of open meeting laws. Callahan recommended that the council has accepted lots of information and at the next meeting have an executive session where the council can discuss all of the information and what approach would be taken going forward.

**Jason Rowe** informed council that he provided a map that shows the holes in Idaho City's map. Rowe explained that the map also shows Hill Rd. crossing through properties.

**Pamela Thompson** explained that she is Jason Rowe's girlfriend, and she frequently visits. In the winter coming down Myers from Hill is the only way she could access Rowe's property.

**Michelle Tincher** asked why when they owned property on Myers St. there was no issue with the road and now there is. Jackson responded that Seward caused the issue when he put in his expanded driveway. She is willing to work with the property owners to ensure they have access if the road is closed. Discussion on potential closure and access ensued.

**Carol Kirkland** explained that she has lived in the area on and off since 1976. Kirkland provided some history regarding roads and closures.

Mayor Everhart closed the public hearing at 7:12pm and called a short recess. Mayor Everhart called meeting back into session at 7:21pm

### III. ENGINEER'S REPORT

#### A. MOUNTAIN WATERWORKS TASK ORDER NO. 294-08

Council President made a motion, seconded by Adams, to authorize the Mayor to sign Task Order No. 294-08. 4 ayes. Motion carried.

### IV. ORDINANCES AND RESOLUTIONS

Ordinances and resolutions are formal measures considered by the City Council to implement policy which the Council has considered. Resolutions govern internal matters to establish fees and charges pursuant to existing ordinances. Ordinances are laws which govern general public conduct. Certain procedures must be followed in the adoption of both ordinances and resolutions; state law often establishes those requirements. **ACTION ITEM**

#### A. REVIEW ORDINANCE 320 COUNCIL MEETING DATE AND TIME

Clerk Ptak informed council that she was informed by a council member requesting to revisit the council meeting time. Elliott added that she has started a new phase in her job and could not guarantee being at the meeting by 6pm. Discussion on meeting time ensued. Council and the Mayor agreed on changing the meeting time to 7pm. Will need to make that change through a new ordinance that will be added to the next agenda.

#### B. REVIEW ORDINANCE 322- CEMETERY RULES & REGULATIONS BY RESOLUTION

Clerk Ptak informed council that this was here as reference to see that there is not anything in place as far as rules and regulations for the cemetery. The next ordinance on the agenda deals with these issues.

#### C. ORDINANCE 377 CEMETERY RULES AND REGULATIONS

Council had looked through the ordinance and discussed one section of the ordinance dealing with when decorations should be removed. Discussion on those dates ensued. It was decided that November 15<sup>th</sup> is when decorations should be removed. The ordinance was updated to reflect that date. Counselor Adams made a motion, seconded by Elliott, pursuant to section 50-902,

Idaho Code, the rule requiring that ordinances be read on three different days, two readings of which may be by title only and one reading of which shall be in full, shall be dispensed with and that Ordinance No. 377 be considered immediately. Secor aye, Adams aye, Elliott aye, Heffington aye. Motion carried. Counselor Secor made a motion, seconded by Adams, Ordinance No. 377 now before the council to be approved. Secor aye, Adams aye, Elliott aye, Heffington aye. Motion carried. The Ordinance will be effective upon publication in the newspaper.

## V. OLD BUSINESS

### A. LOCAL OPTIONS TAX CHECKLIST – DISCUSSION

Item was tabled.

## VI. NEW BUSINESS

### A. ERIK KOSER REQUEST TO VACATE CITY PROPERTY

Council President Secor recused himself from this discussion. Coleen Marks, surveyor for Erik Koser addressed council and informed them she had surveyed a portion of the land owned by Koser, Secor, the Oddfellows Lodge, and one other owner. Marks referenced a map that was supplied showing gap areas between those properties. Those spaces are what they are requesting to vacate. Discussion on property lines, and who owns the spaces between ensued. City Attorney Callahan informed council that the city can vacate a road which would revert back to the property owner, but city property cannot be given away. Discussion on what has happened in the past, what is city property, and what maintenance is done ensued.

### B. CHARLES MAXWELL UTILITY EASEMENT

Clerk Ptak informed council that Maxwell is looking for a utility easement from the city's power pole at the senior center to his property. Maxwell will need a survey for Idaho Power to get all the paperwork in order for the easement. Discussion on the property location ensued. Council and the Mayor were agreeable to moving forward if Maxwell would pay for the survey and get all of the information together for council to look at.

## VII. EXECUTIVE SESSION

Certain City-related matters may need to be discussed confidentially as a matter of law subject to applicable legal requirements; the Council may enter executive session to discuss such matters. **ACTION ITEM**

## VIII. EMPLOYEE UPDATES

### A. PUBLIC WORKS

Public Works Director Claus informed council that the project on Bear Run has begun. Claus caught a semi from American Roofing Supply on Main St. and informed them that they are overweight for Main St. and need to use an alternate route. Public Works will be cleaning a sand bay the 13<sup>th</sup>. There is a water and sewer line to dig next week for Niehoff. Claus informed council that the last rodeo left the grounds with lots of work for her to clean up. Fence panels were moved out where they should not have been, and a gate was busted. Public works got the panels moved back where they should be, and the gate was replaced. Discussion on the Rodeo Grounds deposit and past damages ensued. Jack Pine has been doing work at the rodeo grounds and they helped with moving panels and the gate repair. Discussion on fees and rental applications ensued.

### B. LAW ENFORCEMENT

Mayor Everhart informed that Watson is on vacation this week so Chief Otter will be patrolling starting the 13<sup>th</sup> from 3pm to 3am through the weekend to continue the city's advanced patrols. ICPD is doing multiple walkthroughs of establishments throughout the night. Heffington asked if the agreement with the county was signed, and Mayor Everhart responded no that he needed to get with Sheriff Turner and Chief Otter to figure that out. City Attorney Callahan added that she has an associate looking into some agreements from other surrounding cities and towns.

### C. CLERK/TREASURER'S OFFICE

#### 1. BUDGET UPDATES

Clerk Ptak informed council they will be receiving an excel spreadsheet of the budget to look over. It will be on the next agenda to approve as a tentative budget. The budget needs to be in to publish by the 31<sup>st</sup> in order to keep the budget hearing in line. Discussion on a special meeting for the budget ensued. Council decided to have a special meeting July 27<sup>th</sup> at 7pm for the budget information. Clerk Ptak added that with council's permission some of the items on the 26<sup>th</sup> agenda could be moved to the special meeting to free up time during the regular meeting on the 26<sup>th</sup>.

#### 2. WATER AND SEWER UPDATES, **ACTION ITEM**

##### a. FOREST SERVICE WATER BILL

Clerk Ptak informed council that there does seem to be a discrepancy with the zeros for the readings. Ptak has been working with Bret Barry on the calculations and they are very close. Ptak is comfortable using Barry's calculations and charging for what has been used. Discussion on the amount of water used and the charge ensued.

Ptak added on the water sewer updates that one is a vacant lot that she is trying to track down the owner and was going to talk with public works about potentially pulling the meter. Claus added that the meter had been locked in the past and someone cut the lock off. Mayor Everhart added that he would rather leave the meter and place a lock on it. That way if the lock is cut and the water is used the city can track the amount of usage. Ptak brought up the Element Construction bills and informed council that those would be on the next agenda. City Attorney Callahan added that letters have been sent to Element Construction and their registered agent informing them they would have the opportunity to discuss the bills with council at the next meeting.

### D. CITY ATTORNEY

City Attorney had no update.

## IX. COUNCIL UPDATES

Secor no update, Adams no update, Elliott no update. Heffington brought up some potential OSHA safety issues. Council decided to address those at the next meeting in executive session.

## X. MAYOR UPDATES

Mayor Everhart no update.

## XI. CITIZEN COMMENTS

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**Paul Booth** addressed council and informed them he is the current Chairperson for the Confederation of Clubs for the Treasure Valley and has been a member of the Vietnam Vets, Legacy Vets Motorcycle Club for the last 20 years. Booth spoke on behalf of his good friends the Vagos Motorcycle Club. Over the last 35 years Booth has come to know many members of the Vagos through school, his career in the Marine Core, working along side them at the Union Pacific Railroad, and more recently working with local members on fundraisers, charity, and legislation in the Treasure Valley. In that time Booth has found those members to be some of the most loyal, hardworking, and patriotic Americans he has known. Booth spoke on the negative things that were said regarding the Vagos Motorcycle Club and explained that the actions of a few should not be placed on the whole group. Booth assured the citizens of Idaho City that in all the years over multiple states that he has known Vagos members, not one of them has tried to traffic anyone or anything to him. Booth implored the citizens of Idaho City to look past the stereotypes and open their hearts to their neighbors.

**Aaron Paulson** addressed council and informed them and the citizens that he and his fiancé live in Boise County in a house that was built by her great grandfather in the 1950's. Paulson is originally from Portland Maine where his father was a city counselor and mayor. Paulson is a graduate of the University of Hartford with a bachelor's degree in media arts management and a 13-year member of the Vagos Motorcycle Club. Paulson explained that the Vagos do not stand for, or accept, the types of actions that had taken place in Idaho City. They immediately expelled the individual from the club and that decision is final and unwavering. Paulson further explained that he and the club are members of the community and have been coming to Idaho City spending money in stores, restaurants, and bars with family and friends. They love living here and would never accept the kind of behavior that unfortunately has shrouded all of them by the actions of one person. Paulson would like the citizens to know that he and his brothers work normal jobs, pay taxes, and are active members of their communities. Before the incident, the Vagos planned to do a motorcycle run to Idaho City which would have brought thousands of dollars in revenue to local businesses but have since moved it out of county with respect to recent comments.

**Shawn Keith** addressed council and informed them he has been involved with the Vagos for the last 2 years and in that time has met some amazing people that he considers family. None of them has he seen buy, sell, use drugs, or any other accusations from the last meeting. Keith explained that the actions of one bad seed from that night have caused a lot of fear and turmoil. The Vagos do not condone his actions and that is why that person has been removed. Keith is family oriented and a devout Christian that attends church regularly in the valley. When first starting to come around the club Keith's wife was nervous due to things on the news and internet. Keith took his family to a camp out with the Vagos, and all the children played together, and everyone was welcomed with open arms. Keith asked for the citizens not to fear them or pass judgement as they do their best to protect friends, family, and community.

**Ben Smith** addressed council and explained that he has been associated with the Vagos for a little over a year and is also a year and a half sober. During his time with the Vagos they have supported him and helped maintain his sobriety. Smith expressed how the club is family oriented and has regular family dinners and BBQ's. Smith explained that if he did not have the Vagos Motorcycle Club in his life he is unsure where he would be.

Mayor Everhart addressed the members of the Vagos Motorcycle Club and appreciated them coming and addressing the situation. He explained that the citizens had a valid concern because of the actions that took place, i.e. gunshots etc.. Mayor Everhart thanked the members that came forward and appreciated their civility and attitude.

Mayor Everhart moved the meeting to the Consent Agenda (see above)

## ADJOURNMENT 8:25

ATTEST:

Date approved:

\_\_\_\_\_  
Nancy L Ptak, City Clerk-Treasurer

\_\_\_\_\_  
Ken Everhart, Mayor

Questions concerning items appearing on this Agenda or requests for accommodation of special needs to participate in the meeting should be addressed to the Office of the City Clerk, 511 Main Street or call 208-392-4584.

**Mayor:**

Ken Everhart

[idahocitymayor1@cityofic.org](mailto:idahocitymayor1@cityofic.org)

**Council members:**

Tom Secor Jr

Ashley M Elliott

Mari Adams

Ryan Heffington

**Chief of Police:**

Mark Otter

[icpd100@cityofic.org](mailto:icpd100@cityofic.org)

**City officers:**

Brent Watson

**Public Works Director:**

Tami Claus

[idahocitypublicworks@cityofic.org](mailto:idahocitypublicworks@cityofic.org)

**Public Works:**

Nick Mancera

Dallas DeCory

**City Clerk-Treasurer:**

Nancy L Ptak

[idahocityclerk@cityofic.org](mailto:idahocityclerk@cityofic.org)

**Deputy Clerk**

Kaleb Goodlett

[idahocityoffice@cityofic.org](mailto:idahocityoffice@cityofic.org)

**Utility Billing Clerk**

Sue Robinson

[4cityfolk@cityofic.org](mailto:4cityfolk@cityofic.org)

511 Main Street

PO Box 130

Idaho City, ID 83631

(208)392-4584

operating hours

Monday - Thursday

8 am - 5 pm

Friday 9am -3pm

**Table 1.** Characteristics of the 1000 patients with a first episode of acute psychosis, by gender and age group

Characteristic	Male		Female	
	n	%	n	%
Age group (years)				
<18	10	1.0	10	1.0
18-24	100	10.0	100	10.0
25-34	190	19.0	190	19.0
35-44	210	21.0	210	21.0
45-54	190	19.0	190	19.0
≥55	110	11.0	110	11.0
Marital status				
Married	100	10.0	100	10.0
Single	200	20.0	200	20.0
Divorced	100	10.0	100	10.0
Widowed	100	10.0	100	10.0
Never married	100	10.0	100	10.0
Education (years)				
<6	100	10.0	100	10.0
6-11	200	20.0	200	20.0
12-17	200	20.0	200	20.0
18-23	200	20.0	200	20.0
≥24	100	10.0	100	10.0
Family history of psychosis				
Yes	100	10.0	100	10.0
No	200	20.0	200	20.0
Family history of affective disorder				
Yes	100	10.0	100	10.0
No	200	20.0	200	20.0
Family history of personality disorder				
Yes	100	10.0	100	10.0
No	200	20.0	200	20.0
Family history of alcohol abuse				
Yes	100	10.0	100	10.0
No	200	20.0	200	20.0
Family history of drug abuse				
Yes	100	10.0	100	10.0
No	200	20.0	200	20.0
Family history of epilepsy				
Yes	100	10.0	100	10.0
No	200	20.0	200	20.0
Family history of other mental disorder				
Yes	100	10.0	100	10.0
No	200	20.0	200	20.0

with a first episode of acute psychosis, by gender and age group.

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with a first episode of acute psychosis, by gender and age group.

with a first episode of acute psychosis, by gender and age group.





For doc #s from to 999999  
\* ... Over spent expenditure

Claim	Check	Invoice #/Inv Date/Description	Vendor #/Name/ Vendor #/Inv Date/Description	Document \$/ Line \$	Disc \$	PO #	Fund Org Acct	Object Proj	Cash Account
		07/05/23 act#2201668064 amphitheater		17.25			41500	930	10100
		07/05/23 acc#2203080029 hw 21 rodeo are		10.13			41500	930	10100
		07/05/23 acc#2202255424 skating rink		5.21			41500	930	10100
		07/05/23 acc#2220462101 220 hw 21 lift		8.84			43500	671	10100
		07/05/23 acc#2205377613 hill rd booster		278.99			43400	671	10100
		07/05/23 acc#2221325844 water tank		122.86			43400	671	10100
		07/05/23 acc#2204493726 3945 hw 21 PH		18.27			43400	671	10100
		07/05/23 acc#2202137416 city pumps		10.26			43400	671	10100
		07/05/23 acc#2202808321 water treatment		857.85			43400	671	10100
		07/05/23 acc#2206171999 city hall		57.28			41500	670	10100
50%		07/05/23 acc#2206171999 city hall		40.10			43400	671	10100
35%		07/05/23 acc#2206171999 city hall		17.18			43500	671	10100
15%		07/05/23 acc#2205634021 207 w comm/emerg		5.21			43200	672	10100
		07/05/23 acc#2206002632 ballfields RR		28.88			41500	930	10100
		07/05/23 acc#2204467670 rodeo gnd RR		18.80			41500	930	10100
		07/05/23 acc#2207091329 3847 hw 21 SP		539.61			43500	671	10100
		07/05/23 acc#2204805382 community hall		149.58			41500	673	10100
		07/05/23 acc#2204647305 main & hw21 VC		174.54			41500	674	10100
		07/05/23 acc#2207764602 3861 HWY 21 RO		334.73			43400	671	10100
2370		181 SIMPLII		3.50					
		55882 08/01/23 City Hall Phone		1.05			41500	490	10100
		55882 08/01/23 City Hall Phone		1.40			43400	490	10100
		55882 08/01/23 City Hall Phone		1.05			43500	490	10100
2371		273 Nick Mancera		121.03					
		na 07/24/23 Mileage 7/17/23		61.18*			43500	450	10100
		na 07/24/23 Mileage 7/24/23		59.85			43400	450	10100
2372		24 HACH COMPANY		1,091.96					
		13660929 07/18/23 WTP & WWTP Chlorine Test Sup		764.37			43400	630	10100
		13660929 07/18/23 WTP & WWTP Chlorine Test Sup		327.59			43500	630	10100
2373		23 IDAHO RURAL WATER ASSOCIATION		600.00					
		1828 06/30/23 Responsible operator charge		300.00			43500	113	10100
		1863 07/21/23 Responsible operator charge		300.00			43500	113	10100

For doc #s from to 999999  
\* ... Over spent expenditure

Claim	Check	Invoice #/Inv Date/Description	Vendor #/Name/ #/Inv Date/Description	Document \$/ Line \$	Disc \$	PO #	Fund	Org	Acct	Object	Proj	Cash Account
2374	182251	07/21/23 City Hall AC repair	13 YMC INC	3,145.38 3,145.38*			10		41500	623		10100
2375		July state 07/24/23 IT Services	235 MICROTECH SYSTEMS	907.00			10		41500	350		10100
		July state 07/24/23 IT Services		272.10*			51		43400	350		10100
		July state 07/24/23 IT Services		453.50*			52		43500	350		10100
				181.40*								
2376		4485183 07/05/23 Copier Lease	182 XEROX FINANCIAL	200.62			10		41500	330		10100
		4485183 07/05/23 Copier Lease		70.22*			51		43400	330		10100
		4485183 07/05/23 Copier Lease		108.33*			52		43500	330		10100
				22.07								
2377		11851 07/01/23 FY 2024 AIC Membership	58 ASSOCIATION OF IDAHO CITIES	445.00			10		41500	460		10100
		11851 07/01/23 FY 2024 AIC Membership		24.00			51		43400	460		10100
		11851 07/01/23 FY 2024 AIC Membership		328.00*			52		43500	460		10100
		12043 07/11/23 ICCTFOA Membership - Nancy		48.00*			10		41500	460		10100
		12043 07/11/23 ICCTFOA Membership - Nancy		2.70			51		43400	460		10100
		12043 07/11/23 ICCTFOA Membership - Nancy		36.90*			52		43500	460		10100
				5.40*								
2378		NA 07/25/23 Rodeo Grounds Deposit Refund	999999 MARK STOUT	150.00			10		41500	360		10100
				150.00								
2379		999269534 07/14/23 Kaleb Goodlett Notary Bond	999999 LIBERTY MUTUAL	50.00			10		41500	460		10100
				50.00								

# of Claims 20 Total: 14,518.86

Fund/Account	Amount
10 GENERAL FUND	
10100 Checking-Cash in Bank	\$5,357.50
20 STREET FUND	
10100 Checking-Cash in Bank	\$424.45
51 WATER FUND	
10100 Checking-Cash in Bank	\$6,250.44
52 SEWER FUND	
10100 Checking-Cash in Bank	\$2,486.47
<b>Total:</b>	<b>\$14,518.86</b>
	14518.86
	+491.18
	+453.79
	+433.79
	+429.41
	<b>\$16,327.03</b>

07/26/23  
15:36:18

CITY OF IDAHO CITY  
Claim Approval Signature Page  
For the Accounting Period: 7 / 23

Page: 5 of 5  
Report ID: AP100A

City of Idaho City  
PO Box 130  
511 Main Street  
Idaho City, Idaho 83631-0130

CASH VOUCHERS

Authorized by: \_\_\_\_\_ Date: \_\_\_\_\_





## 2023 Updated Plan of Operations

**City of Idaho City**  
Reuse Permit M-108-04

*July 2023*

**Prepared on Behalf of:**

City of Idaho City  
511 Main St.  
Idaho City, ID 83631  
(208) 392-4584

**Prepared By:**

Mountain Waterworks, Inc.  
PO Box 9906  
Boise, ID 83707  
(208) 780-3990  
office@mountainwtr.com

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## Appendices

- Appendix A: The City of Idaho City Wastewater Reuse Permit Number M-108-04
- Appendix B: Daily Log and the Irrigation System Data Management Spreadsheet
- Appendix C: Chain of Custody Record

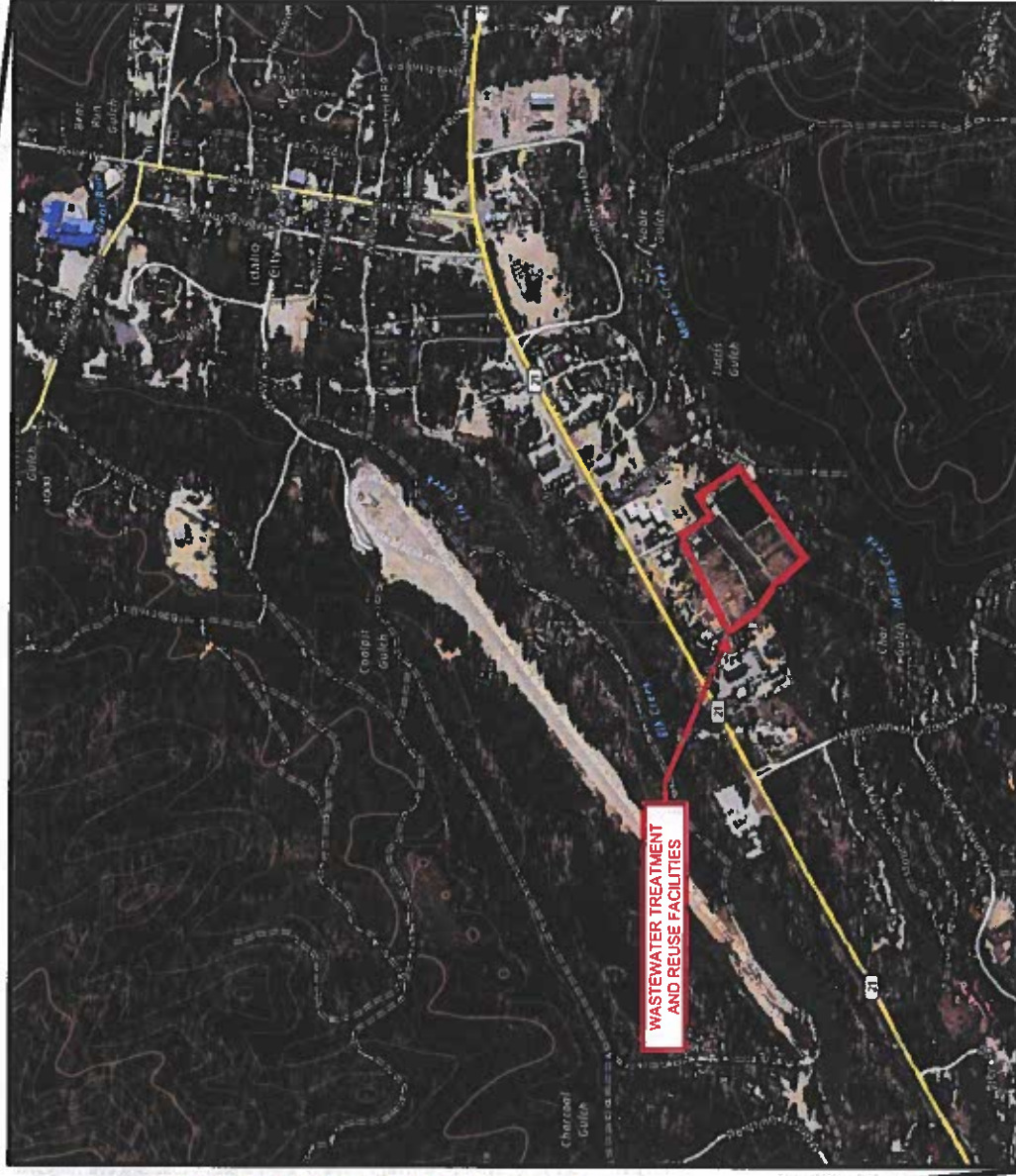
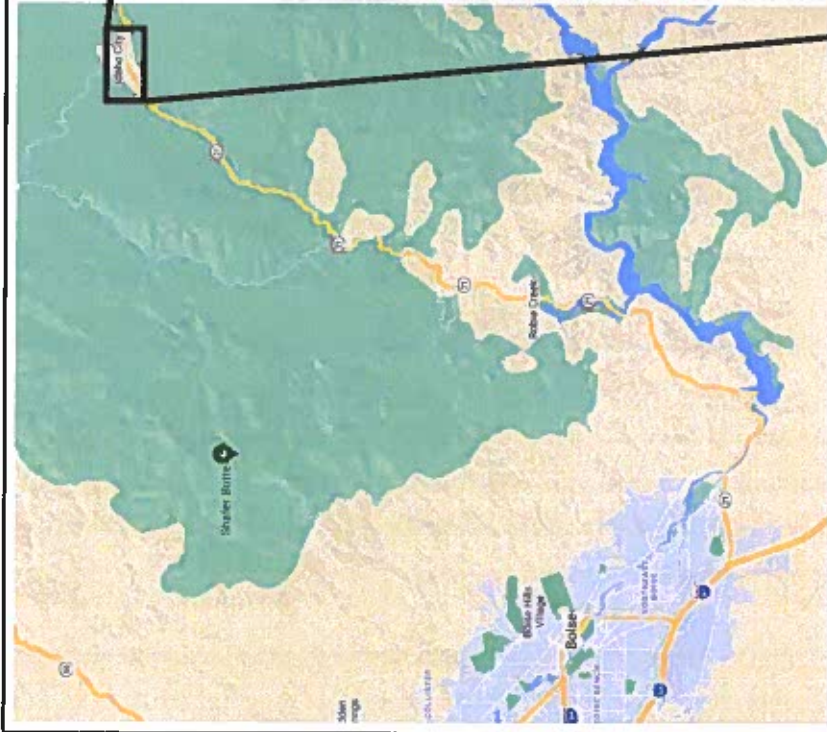
## Section 1      **INTRODUCTION AND PURPOSE**

The City of Idaho City (City) owns and operates a wastewater reuse system as managed under Wastewater Reuse Permit Number M-108-04 (Permit, **Appendix A**) as issued by the Idaho Department of Environmental Quality (IDEQ). The system treats wastewater from the City municipal system serving approximately 500 residents and businesses in Idaho City, Idaho.

The City is located approximately 40 miles northeast of Boise along Idaho Highway 21 (ID-21) in Boise County, Idaho. The City's treatment facility occupies parcel RP10000026545B, which is approximately 15.26 acres, owned by the City, and is located at the end of an unnamed road south of ID-21. The site occupies a portion of Section 26, Township 6N, Range 2E, Boise Meridian, and is located at approximate Latitude 43 49' 19" North and Longitude 115 50' 23" West. Mores Creek is near the southern boundary of the parcel, with a small, unnamed surface drainage in the middle of the parcel. Land use surrounding the Facility is a mixture of residential, commercial, light industrial, and county. Warning signs are posted around the wastewater lagoon and RIBs, however the barbed wire fencing surrounding the facilities is in poor condition. The general location of the system and system components are shown on **Figure 1-1** and **Figure 1-2**.

The City reuse permit, issued July 25, 2022 requires Idaho City under Compliance Activity (CA) Number CA-108-01 to provide an updated Plan of Operation (PO) for the IDEQ review and approval. The plan of operation must contain, as applicable, operation and management responsibility, permits and standards, general plant description, operation and control of unit operations, reuse area site maps, wastewater and recycled water characterization, cropping plan, hydraulic loading rate, constituent loading rates, compliance activities, seepage rate testing, site management plans, monitoring, site operations and maintenance, solids handling and processing, laboratory testing, general maintenance, records and reports, store room and inventory, personnel, and an emergency operating plan. Permittees are required to submit a plan of operation for review and approval.

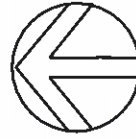
This Plan is intended to meet the intent of the requirements of CA-108-04. Operational and/or facility changes to the treatment or land application system that alter operational procedures must be captured in the PO. This PO will be updated and submitted to the IDEQ for review and approval following any facility updates.



**LEGEND**

— MAJOR CONTOUR

— MINOR CONTOUR



NORTH

ENGINEERING AND ENVIRONMENTAL SOLUTIONS

1161 W. RIVER ST., SUITE 130  
BOISE, IDAHO 83702  
208.850.9978



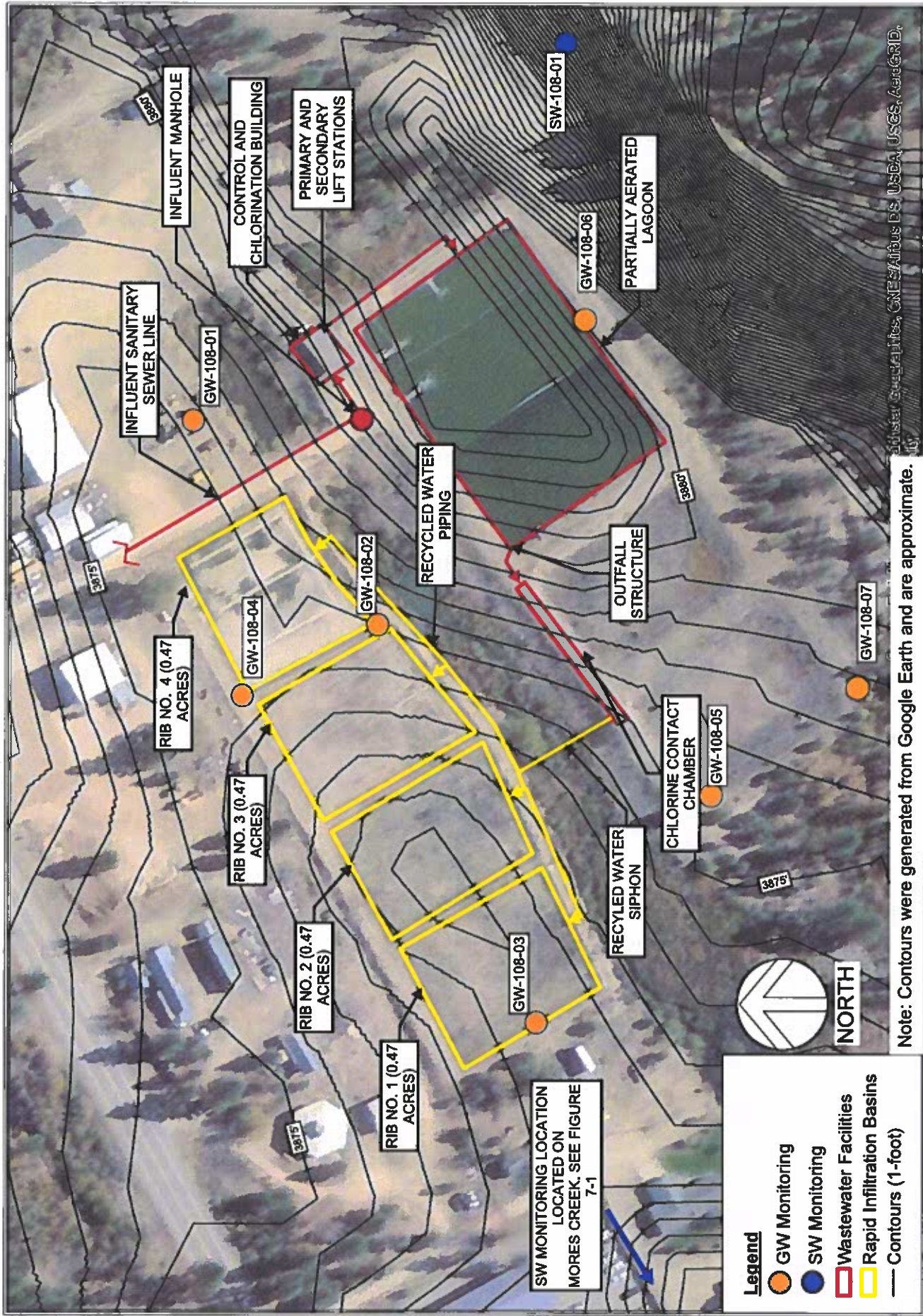
IDAHO OFFICES  
BOISE · LEWISTON · McCALL

VICINITY AND TOPOGRAPHIC MAP (NOT TO SCALE)

IDAHO CITY PLAN OF OPERATIONS

PROJECT NO.:  
234.0050

SHEET NO.  
FIGURE 1-1



Note: Contours were generated from Google Earth and are approximate.

V:\GIS\Projects\I-1\_Projects\I-1\_CityFacility\_Map.mxd



**FIGURE 1-2**  
**WASTEWATER TREATMENT AND RECYCLED WATER TREATMENT FACILITIES**  
**IDAHO CITY PLAN OF OPERATIONS**

## Section 2 **OPERATION AND MANAGEMENT RESPONSIBILITY**

The City land application and treatment facilities are operated and monitored by the following personnel:

- **City Public Works Director** – Coordinates resources for the maintenance of the wastewater systems and other facilities.
- **Responsible Charge Operator** – Oversees the operation and maintenance of the wastewater collection, treatment, and land application systems.
- **City Council** – Responsible for providing direction to City Public Works Director and Responsible Charge Operator.

The wastewater treatment system is classified as a Class II facility, therefore requiring an operator with a Class II license or higher, in accordance with IDAPA 58.01.16.203. The reuse system requires the operator to have a land application certification. The wastewater operator will use this PO as a reference to guide operations and sampling as required by the Permit. The wastewater operator will coordinate, plan, and approve the land application of effluents.

The responsible charge operator at the facility is required to have a current operating license. Training and certification requirements are detailed in Section 1.6 of the Quality Assurance Project Plan (QAPP). Currently, Paul Sifford from the Idaho Rural Water Association is the Responsible Charge Operator. Current responsible parties and their certifications are summarized in **Table 2-1**.

**Table 2-1: Responsible Parties**

Title	Current Staff (July 2023)	Contact Information	Certification(s)
Responsible Charge	Paul Sifford – Idaho Rural Water Association	6395 W Gowen Road Boise, ID 83709 (208) 343-7001	WWT3, WWC1, WWTLA
City Public Works Director	Tami Claus	P.O. Box 130 Idaho City, ID 83631 (208) 984-0724	NA
Responsible Official	Kenny Everhart	P.O. Box 130 Idaho City, ID 83631 (208) 392-4584	NA



## Section 3 **PERMITS AND OTHER REGULATORY REQUIREMENTS**

### **3.1 Reuse Permit M-108-04**

The current permit expires July 26, 2027, and requires an annual report to be submitted to the IDEQ by no later than January 31 of each year. For permit renewal, CA-108-04 requires a pre-application conference with the IDEQ to discuss the compliance status of the facility 12 months prior to expiration of the current permit. In accordance with the IDEQ Rules IDAPA 58.01.17 "Recycled Water Rules" and CA-108-08, submittal of a permit renewal application will be at least 6 months prior to expiration of the existing permit. Site specific requirements specified by the permit include:

### **3.2 Permit Conditions**

#### **3.2.1 General Permit Conditions**

The Permit contains provisions for application of Class C or D recycled water. Although the Facility appeared capable of meeting the disinfection requirements for Class C recycled water for most of 2022, sampling was not completed at the higher frequency required per Section 5.1 of the Permit to demonstrate compliance with Class C standards. Consequently, water produced by the facility during 2022 must be classified as Class D.

The Permit provides the following limits and conditions with respect to the City's reuse operation:

- Application of reuse water is allowed year around.
- The wastewater treatment and reuse system shall be operated by personnel certified and licensed in the State of Idaho as specified in IDAPA 58.01.16.203.
- For Class D reuse water: The median number of total coliform organisms does not exceed 230 total coliform organisms/100mL, as determined from the bacteriological results of the last 3 days for which analyses have been completed. No sample shall exceed 2,300 total coliform organisms/100mL in any confirmed sample.
- For Class C reuse water: The median number of total coliform organisms does not exceed 23 total coliform organisms/100mL, as determined from the bacteriological results of the last 5 days for which analyses have been completed. No sample shall exceed 230 total coliform organisms/100mL in any confirmed sample.
- Warning signs reading "Caution: Recycled Water – Do Not Drink," or equivalent signage in both English and Spanish shall be posted every 500 feet and at each corner or the outer perimeter of the irrigated sites. Signs are required where MU border areas are accessible to the public.
- Fencing is required around all management units. The type must be cyclone with barbed wire, or another type approved by the IDEQ.
- Backflow prevention is required to protect surface water and groundwater from an unauthorized discharge of recycled water or wastewater.

### 3.2.2 Hydraulic Management Units

The acreage used at each hydraulic management unit (HMU) must be reported annually. A summary of the HMUs is provided in **Table 3-1**.

**Table 3-1: Hydraulic Management Unit Summary**

HMU	Description	Irrigation Type	Maximum Acres Allowed	Acreage Utilized During 2022
MU-108-01	RIB 1	Even Distribution	0.47	0.00
MU-108-02	RIB 2	Even Distribution	0.47	0.11
MU-108-03	RIB 3	Even Distribution	0.47	0.26
MU-108-04	RIB 4	Even Distribution	0.47	0.43
<b>Total acreage</b>			<b>1.88</b>	<b>0.80</b>

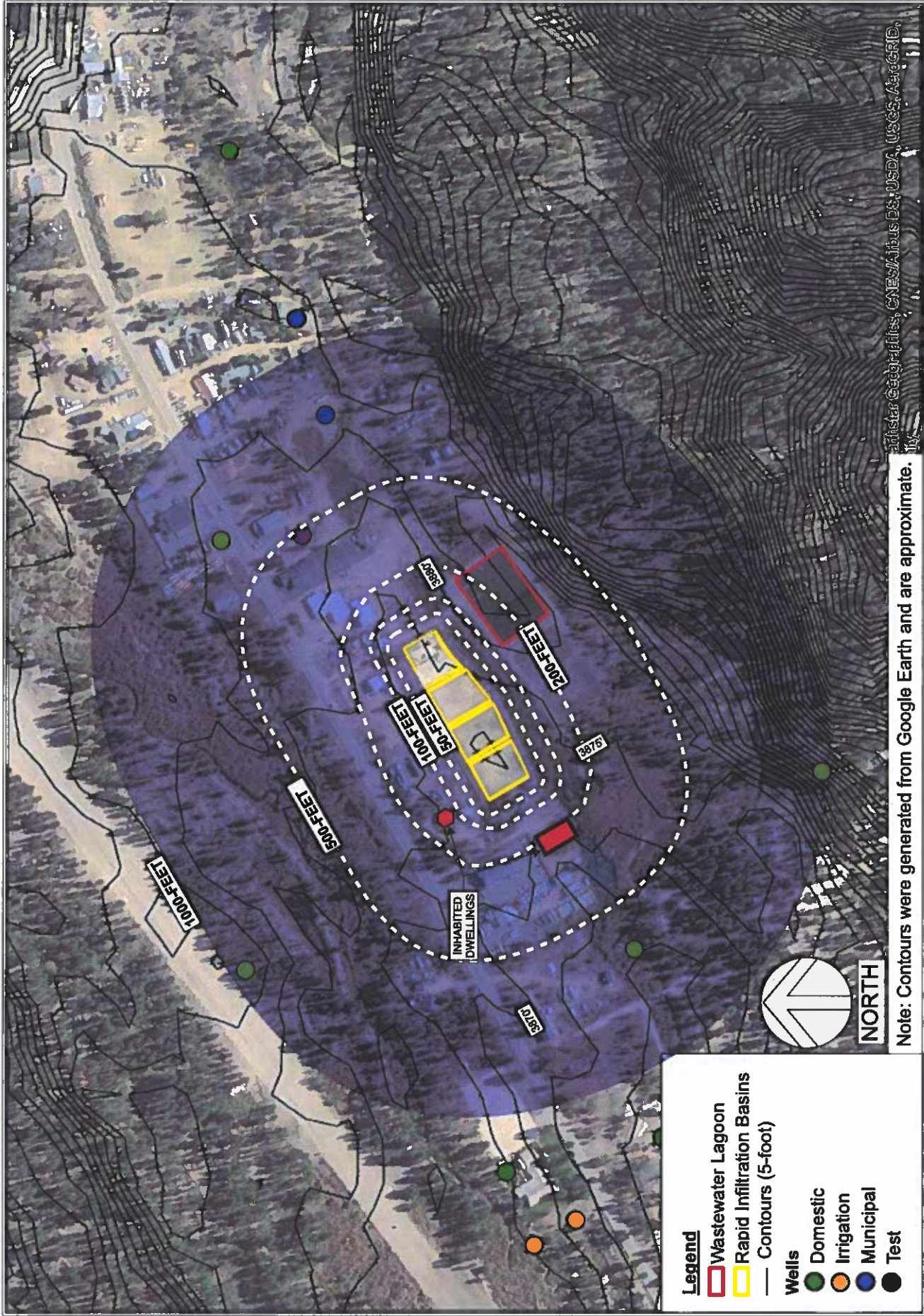
The HMUs are required to meet the buffer distances in **Table 3-2** depending on the type of recycled water discharge from the Facility. Buffer distances are shown on **Figure 3-1**.

**Table 3-2: Hydraulic Management Unit Buffer Distance Requirements**

HMU	Buffer Distances (in feet) from Hydraulic Management Units					
	Public Water Supplies <sup>a</sup>	Private Water Supplies	Inhabited Dwellings	Permanent and Intermittent Surface Water <sup>b</sup>	Irrigation Ditches and Canals	Areas Accessible to the Public
<b>Class D Reuse Water</b>						
MU-108-01	1,000	500	200	50	25	100
MU-108-02						
MU-108-03						
MU-108-04						
<b>Class C Reuse Water</b>						
MU-108-01	1,000	500	50	50	25	0
MU-108-02						
MU-108-03						
MU-108-04						

**Notes:**

- a. Buffer Zone distances apply unless an IDEQ-approved well location acceptability analysis indicates an alternative buffer zone is acceptable.
- b. The drainage channel located to the south of the RIBs is at an acceptable distance.



**Legend**

- Wastewater Lagoon
- Rapid Infiltration Basins
- Contours (5-foot)

**Wells**

- Domestic
- Irrigation
- Municipal
- Test



VGISProjects\4\_Projects\Idaho City\IB Buffer Map.mxd

Note: Contours were generated from Google Earth and are approximate.

Atlas Geographics, CES/Albus ES, USDA, USGS, AeroGRID,

0 125 250 500 750 1,000 Feet

**FIGURE 3-1**  
**HYDRAULIC MANAGEMENT UNIT BUFFER DISTANCES**  
**IDAHO CITY PLAN OF OPERATIONS**

### 3.2.3 Hydraulic Loading Limits

Application of recycled water must be monitored and recorded for each HMU. Hydraulic loading shall be measured in million gallons and gallons per day.

**Table 3-3: Hydraulic Loading Limit Summary**

HMU	Year Round <sup>a</sup> Hydraulic Loading Limit
MU-108-01	Loading <sup>b</sup> shall not exceed infiltrative capacity of any basin.
MU-108-02	
MU-108-03	
MU-108-04	

Notes:

- a. Record Daily, as necessary, abnormal conditions as a result of nongrowing season application including ponding, excessive ice buildup, or runoff from the permitted site.
- b. The rotation schedules for RIB loading must be as specified in the IDEQ-approved Plan of Operation.

### 3.2.4 Constituent Loading Limits

The Permit limits nitrogen and phosphorus concentrations and annual loading rates for each HMU where recycled water is applied. A summary of constituent loading limits is provided in **Table 3-4**.

**Table 3-4: Constituent Loading Limit Summary**

HMU	Maximum Concentration (mg/L) <sup>a</sup>		Annual Loading (lb) <sup>a</sup>	
	Total Nitrogen	Phosphorus	Total Nitrogen	Phosphorus
MU-108-01	30	6	5200	765
MU-108-02				
MU-108-03				
MU-108-04				

Notes:

- a. Compliance Activity CA-108-04 may show that these limits are not stringent enough and may need to be revised and replaced with a surface water discharge permit.

### 3.3 Monitoring Requirements

#### 3.3.1 Recycled Water and Surface Water Sampling and Analyses

The Permit requires recycled water and surface water monitoring as describes in **Table 3-5**.

**Table 3-5: Recycled Water and Surface Water Constituent Monitoring Summary**

Monitoring Point	Sample Description	Sample Type and Frequency	Constituents (units in mg/L unless otherwise specified)
WW-108-01 Point of discharge to RIBs	Recycled water from LG-108-01 to all RIBs	Grab/monthly	Total Kjeldahl nitrogen, as N Nitrite + nitrate-nitrogen, as N Total phosphorus, as P Ph (Standard Units) Chloride Total coliform organisms/100mL <sup>a</sup> Total Residual Chlorine <sup>a</sup>
SW-108-01 SW-108-02 SW-108-03 SW-108-04 <sup>b</sup>	Surface water of Mores Creek	Field measurements: monthly <sup>c</sup>	pH (Standard Units) Temperature (°C) Dissolved Oxygen Total Residual Chlorine
		Grab sample: monthly <sup>c</sup>	Parameters for Lab Analysis Total Kjeldahl nitrogen, as N Nitrite + nitrate-nitrogen, as N Total phosphorus, as P Ammonia Biochemical Oxygen Demand (BOD <sub>5</sub> )  Chloride E. coli (organisms/ 100 mL) <sup>d</sup>

**Notes:**

- a. Weekly grab sample required if the permittee discharges Class C recycled water to the RIBs (IDAPA 58.01.17.601.03).
- b. Notify IDEQ if snow or ice prohibits collection of surface water samples.
- c. Monthly for first two years of the permit and quarterly thereafter (February, May, August, and November) if constituent levels do not exceed thresholds determined in CA-108-04 and approved by IDEQ.
- d. The permittee shall notify IDEQ's Boise Regional Office immediately if any surface water sample analysis, either in the upstream or downstream locations shows coliform counts that exceed 406 E. coli organisms per 100mL (IDAPA 58.01.02.251.01.b.ii).

### 3.3.2 Groundwater Monitoring

Groundwater monitoring is required to be conducted at the monitoring wells outlined in Table 3-6. The Permit requires groundwater monitoring as described in Table 3-7.

**Table 3-6: Groundwater Monitoring Locations**

Monitoring Point	Common Designation	Well Type	Gradient Location
GW-108-01	MW 1	Monitoring well	Upgradient
GW-108-02	MW 2	Monitoring well	Midpoint downgradient (between RIB 3 and RIB 4)
GW-108-03	MW 3	Monitoring well	Downgradient of MU-108-01
GW-108-04	MW 4	Monitoring well	Midgradient (next to LG-108-01)
GW-108-05 <sup>a</sup>	MW 5	Monitoring well	Downgradient of LG-108-01
GW-108-06 <sup>a</sup>	MW 6	Monitoring well	Midgradient (next to LG-108-01)
GW-108-07 <sup>a</sup>	MW 7	Monitoring well	Downgradient of LG-108-01

Notes:

a. Wells to be constructed summer 2023.

Groundwater sampling from the monitoring wells is required as described in Table 3-7.

**Table 3-7: Groundwater Sampling Requirements**

Monitoring Point	Description	Sample Type and Frequency	Constituents (units in mg/L unless otherwise specified)
GW-108-01 GW-108-02 GW-108-03 GW-108-04 GW-108-05 <sup>b</sup> GW-108-06 <sup>b</sup> GW-108-07 <sup>b</sup>	Monitoring Wells	Field measurements: quarterly (February, May, August, November)	Water table elevation (feet) Water table depth (feet) Specific conductance/electrical conductivity (mhos/cm) Temperature (°C) pH (Standard Units)
		Unfiltered grab sample: quarterly (February, May, August, November)	Total Kjeldahl nitrogen, as N Nitrite + nitrate-nitrogen, as N Total phosphorus, as P Total dissolved solids Chloride <i>E. coli</i> <sup>a</sup>

Notes:

a. *E. coli* analysis sensitivity for groundwater samples must be capable of producing results of 1 organism/100 mL.

b. The permittee shall commence monitoring of these wells after wells after construction.

### 3.3.3 Management Unit and Other Flow Monitoring

The Permit requires flow monitoring as described in **Table 3-8**.

**Table 3-8: Hydraulic Loading Monitoring Summary**

Monitoring Point	Sample Description	Sample Type and Frequency	Parameters
FM-108-01 Ultrasonic flow level measurement and V-notch weir at LG-108-01 outlet.	Recycled water from LG-108-01 to all RIBs	Daily Meter Reading Monthly compilation of data	Volume (MG/month) Volume (gallons/day) <sup>a</sup>
FM-108-02 Clamp on ultrasonic flow meter on influent line	Wastewater influent to LG-108-01	Daily meter reading Monthly compilation of data	Volume (MG/month)

Notes:

a. Record which RIB is in Use.

### 3.3.4 Soil Monitoring

Soil monitoring is not required under the Permit.

### 3.3.5 Crop Monitoring

Crop monitoring is not required under the Permit.

## Section 4 GENERAL PLANT DESCRIPTION

### 4.1 System Overview

The wastewater treatment facilities were constructed in 1988 as part of upgrades to the existing wastewater lagoon system. No significant upgrades or modifications have been made to the treatment process since. The Facility collection system conveys wastewater via gravity to the treatment facility, which is comprised of headworks, partially aerated lagoons, chlorine contact pipe, rapid infiltration basins, control building and associated valving and piping.

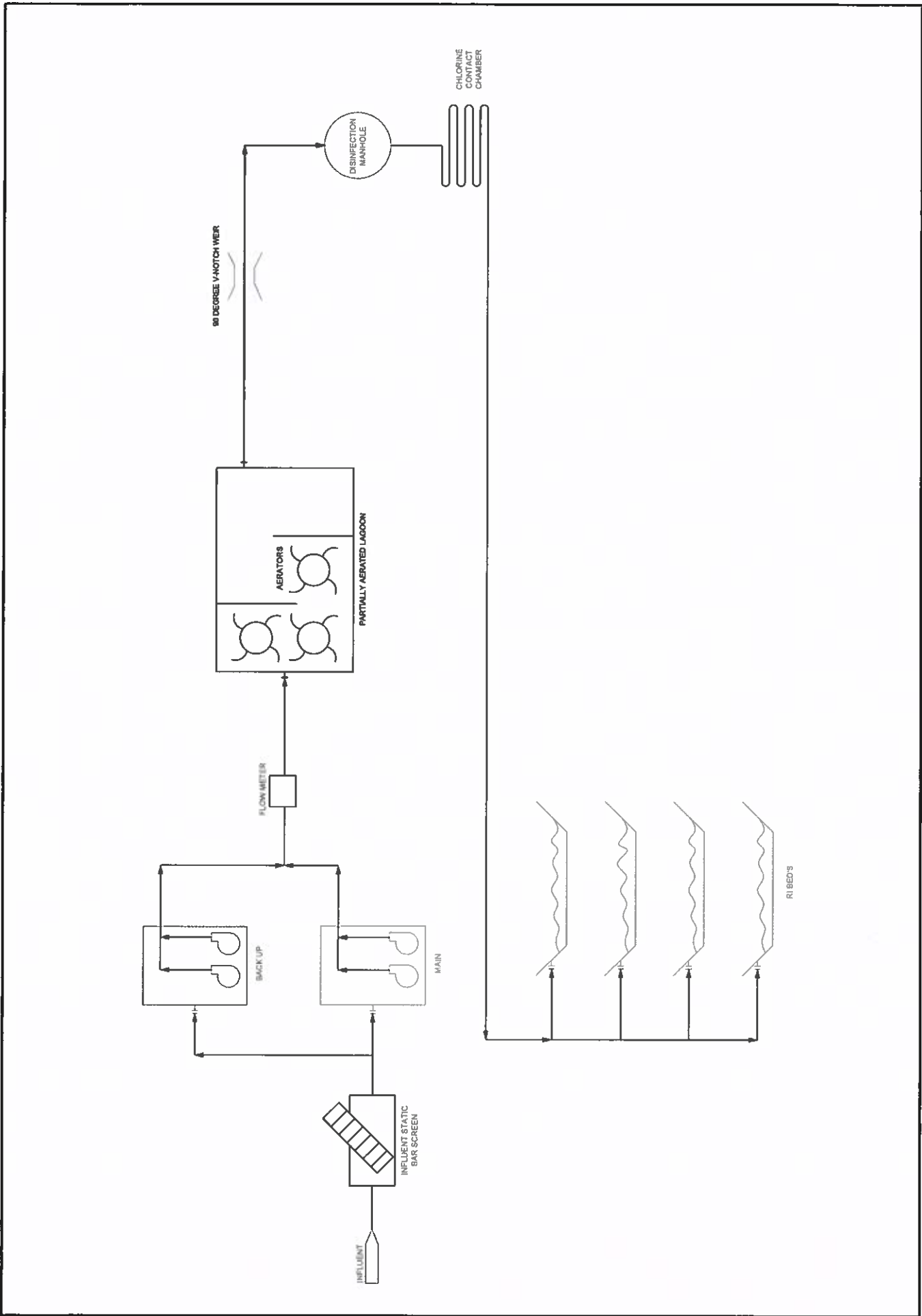
The headworks consists of a bar screen, lift station and flow meter. Solids are screened from the influent flow upstream from the lift station wet well. Screened influent flow enters the wetwell and is pumped to the partially aerated lagoon. The lagoon has two baffle curtains that control the direction of flow through the lagoon. Effluent from the lagoon flows into an outfall structure where effluent flow is measured. Facility effluent is disinfected using gaseous chlorine and is conveyed to the RIBs through a siphon. Valving on the recycled water distribution system is used to control flow to specific RIBs. The process flow diagram for the system is provided in **Figure 4-1**.

capacities of the wastewater and reuse system components, as identified in the 2016 Wastewater Facility plan, are summarized in **Table 4-1**.

**Table 4-1: Treatment/Reuse System Capacities**

Component	Description	Capacity
Influent	Raw Domestic Wastewater	80,288 gpd (Average) 117,605 gpd (Max Month) 214,299 gpd (Max Day)
Screen	1-inch Bar Screen	No Design Parameters Available
Lift Station	Wet Well/Dry Well	570 gpm
Aerated Lagoon	1 Cell	2.14 million gallons Aeration Capacity = 288 lb-O <sub>2</sub> /day
Chlorine Disinfection	Gaseous Chlorine	Contact Chamber Volume = 16,920 gal Contact Time (max day flow) = 1.9 hours
Rapid Infiltration Basins	4 Basins	Area = 0.47 acres/basin Estimated Infiltration Rate = 6 - >20 in/hr





**FIGURE 4-1**  
**WASTEWATER TREATMENT PROCESS FLOW DIAGRAM**  
**IDAHO CITY PLAN OF OPERATIONS**

## 4.2 Recycled Water Characterization

There is one recycled water monitoring location stipulated by the permit, WW-108-01. Monitoring requirements are identified in **Table 3-5** above. The average monitoring results for consistently sampled parameters for the previous five years is provided in **Table 4-2**.

**Table 4-2: Historical RIB Influent Monitoring Results, 2018 - 2022**

Year	Chlorine Residual (mg/L)	Nitrate + Nitrite (mg/L)	Ammonia (mg/L)	TKN (mg/L)	Total P (mg/L)	Total Coliform (mpn/100mL)
2018	1.9	0.04	16.08	19.90	3.45	9
2019	1.9	0.08	16.37	21.12	3.14	39
2020	1.5	0.15	16.33	23.93	3.37	67
2021	1.9	0.50	13.10	21.38	3.52	<2 - 770
2022	1.9	1.16	11.26	16.54	2.73	<2 - >1600

## 4.3 Hydraulic Loading Rates

The Facility land applied approximately 33.3 million gallons of recycled water to the RIBs during the most recent reporting year (2022). The current Permit limits the hydraulic loading rate of the RIBs to not exceed the infiltrative capacity of any basin. Average hydraulic loading rates during the previous five years are provided in **Table 4-3**. The current Permit also requires that the hydraulic loading shall be rotated between the RIBs. Hydraulic loading volume for the previous five years is presented in **Table 4-3**.

**Table 4-3: Average Hydraulic Loading, 2018-2022**

Year	RIB No. 2	RIB No. 3	RIB No. 4
	Volume (Mgal)	Volume (Mgal)	Volume (Mgal)
2018	0	29.4	0
2019	0	25.8	9.4
2020	0	11.9	10.7
2021	0	13.27	12.60
2022	2.49	14.82	15.98
<b>Average</b>	<b>0.50</b>	<b>19.04</b>	<b>9.74</b>

## 4.4 Constituent Loading Rates

Constituent loading rates for total nitrogen and phosphorus are calculated based on the influent RIB influent concentrations monitored at WW-108-01. The permit limits annual loading of total nitrogen and phosphorus to 5,200 and 765 pounds, respectively. Total annual loading during the previous five years is presented in **Table 4-4**.

**Table 4-4: Annual Constituent Loading, 2018-2022**

Year	Nitrogen		Phosphorus	
	Load (lb)	% of Permit Limit	Load (lb)	% of Permit Limit
2018	3,683	71%	621	80%
2019	5,088	98%	755	99%
2020	3,676	71%	494	65%
2021	4,201	81%	703	92%
2022	4,592	88%	691	90%
<b>Average</b>	<b>4,248</b>	<b>82%</b>	<b>653</b>	<b>85%</b>

# SYSTEM DESCRIPTIONS, OPERATIONS, AND CONTROL OF UNIT OPERATIONS AND PROCESSES

## 5.1 System Headworks

Wastewater flows from the collection system by gravity to the treatment plant, where the wastewater enters a manhole containing a bar screen. The bar screen has approximate 1-inch slots, and the screen is cleaned manually. Screened effluent flows northeast to a wet well.

There are two lift station systems on site, the backup influent lift station was constructed in 1985 with the main lift station constructed in 1988. Both lift stations are operational. Influent flow is then measured by an ultrasonic flow meter on the lift station discharge piping. **Table 5-1** summarizes the frequency of operational and maintenance activities included in pretreatment.

**Table 5-1: Frequency of Operational and Maintenance Activities at Pretreatment**

O&M Activity	Frequency
Record flowmeter reading with date and time of reading	Daily, at approximately the same time
Inspect lift station pumps and influent piping for blockages	Daily
Inspect bar screen and clean as needed	Daily

## 5.2 Treatment Lagoon

From the lift station, the wastewater is pumped into a single treatment lagoon. The lagoon was originally constructed in 1985. The lagoon is approximately 260-feet long by 180-feet wide and 7.7 feet deep. Assuming side slopes of 2:1, the total operating volume in the lagoon is approximately 2.14 million gallons. The lagoon has two baffle curtains which were added to control the direction of flow within the lagoon. The liner material is not known; however, it is apparent that leakage is occurring. Seepage testing was conducted 2012 and the seepage rate was found to be approximately 0.61 in/day.

The lagoon currently has 3 aerators attached to floating docks. These aerators are manufactured by Aeration Technologies Inc. and are equipped with 2.0 hp motors. There are 2 baffle curtains that control the direction of flow through the lagoon and divide the lagoon into 3 sections. The wastewater flows from the influent pipe northwest towards the aerators through the first section, southeast through the middle section, and northwest through the third section to the discharge weir.

**Table 5-2** summarizes O&M activities included during normal operation of the lagoon. Sludge accumulation must be periodically monitored in the lagoon and removed when excessive build-up occurs. A Sludge Management Plan will be submitted to the IDEQ for review and approval before accumulated solids are removed from the lagoons.

**Table 5-2: Treatment Lagoon O&M Activities During Normal Operation**

O&M Activity	Frequency
Record conditions at lagoon and correct if problems found: Example: Buildup of wind-blown debris or scum accumulation	Daily
Observe liner for general appearance and damage.	
Adjust aerator operation to account for varying organic loading and prevent odors: <ul style="list-style-type: none"> <li>Anaerobic conditions often lead to odors</li> </ul> Color should be a dark sparkling green under normal conditions	As needed
Monitor sludge accumulation	Every 3 to 5 years

### 5.3 Disinfection System

Effluent from the lagoons flows into an outfall structure and into the disinfection system. The outfall structure includes a vertically adjustable 90-degree V-notch weir and ultrasonic flow meter. The weir crest elevation controls the water surface elevation in the lagoon, and the crest can be moved up or down by adding or removing 4-inch wide metal spacer plates below the weir plate in the outfall structure.

A 2-inch service water pipe feeds the chlorination building where gaseous chlorine is injected. A 1.5-inch chlorine supply line doses chlorine to the contact chamber. The contact chamber is a 48-inch diameter, 180-foot-long concrete pipe. It provides 16,920 gallons of storage which equates to 1.9 hours of chlorine contact time at maximum day flow. **Table 5-3** summarizes O&M activities included during normal operation of the disinfection system.

**Table 5-3: Disinfection System O&M Activities During Normal Operation**

O&M Activity	Frequency
Check chlorine cylinders	Daily
Check leak detection system, warning beacon, and safety equipment	
Check chlorine residual and adjust system as needed to meet permit requirements	
Recommended maintenance by manufacturer	As recommended by manufacturer

## 5.4 Rapid Infiltration Basins

Four hydraulic management units (HMUs) are permitted for application of recycled water under the existing Permit, MU-108-01, MU-108-02, MU-108-03, and MU-108-04. Each HMU is described in **Table 5-4**.

**Table 5-4: Hydraulic Management Unit Summary**

HMU	Description	Irrigation Type	Maximum Acres Allowed
MU-108-01	RIB 1	Even Distribution	0.47
MU-108-02	RIB 2	Even Distribution	0.47
MU-108-03	RIB 3	Even Distribution	0.47
MU-108-04	RIB 4	Even Distribution	0.47
<b>Total acreage</b>			<b>1.88</b>

The acreage used at each hydraulic management unit (HMU) must be reported annually. The HMUs used during most recent five years are identified in **Table 5-5**. **Table 5-6** summarizes O&M activities included during normal operation of the RI basins.

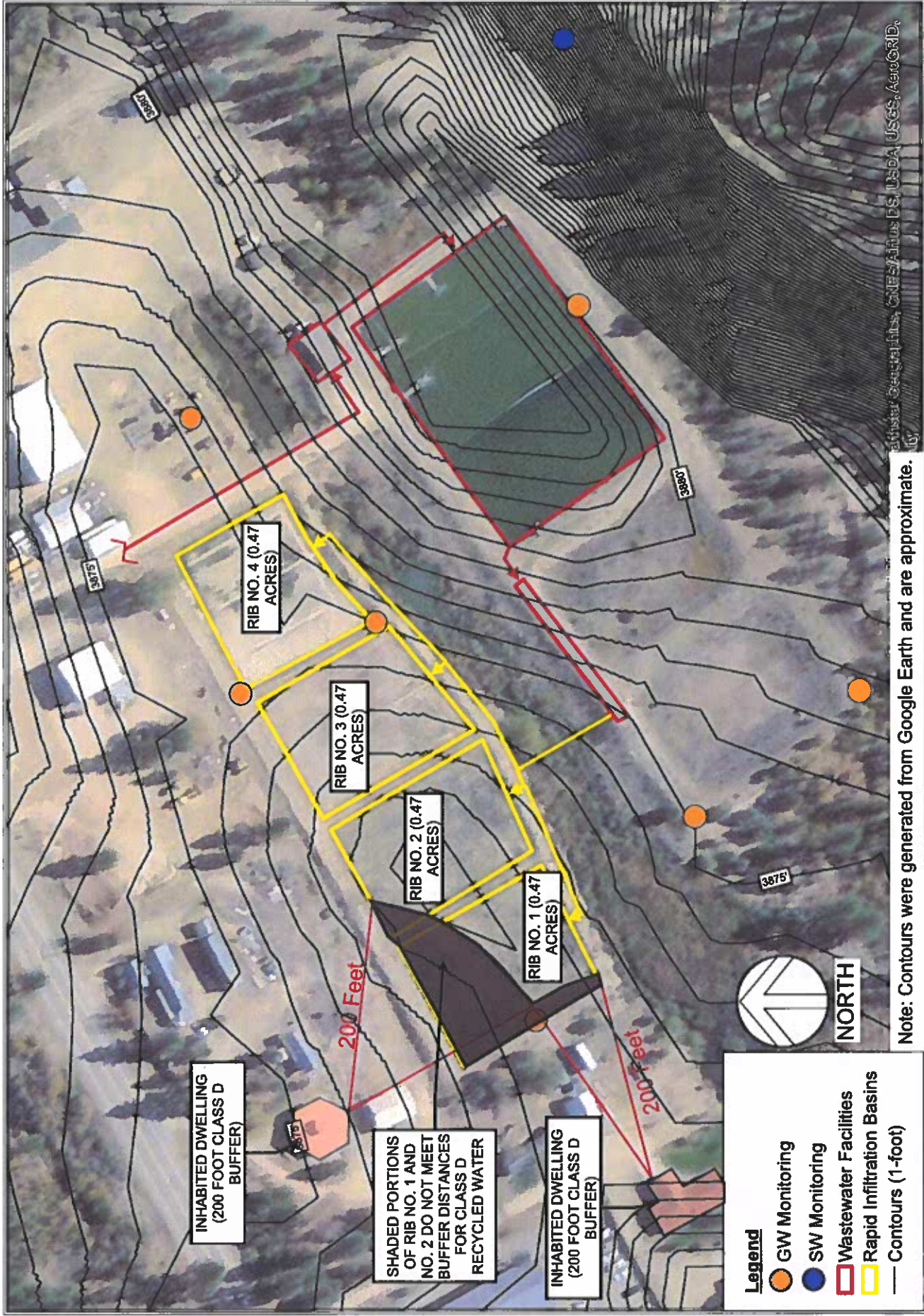
**Table 5-5: Hydraulic Management Use, 2016-2020**

HMU	Description	Was Recycled Water Applied to the HMU?				
		2018	2019	2020	2021	2022
MU-108-01	RIB No. 1	No	No	No	No	No
MU-108-02	RIB No. 2	No	No	No	No	Yes
MU-108-03	RIB No. 3	Yes	Yes	Yes	Yes	Yes
MU-108-04	RIB No. 4	No	Yes	Yes	Yes	Yes

**Table 5-6: Rapid Infiltration Basin O&M Activities During Normal Operation**

O&M Activity	Frequency
Check for ponding or excessive vegetation growth	Daily
Rotate loading between basins as required by operations plan	Every 7 to 14 Days as described in Section 6 of this document

The HMUs are required to meet the buffer distances described in Section 3.2.2 above, depending on the type of reuse water discharged from the Facility. **Figure 3-1** depicts the buffer distances surrounding the RI basins based. As shown in the figure, two inhabited dwellings located to the southwest of the RIBs are within the 200 and 50-foot buffer zones. Considering this, only portions of the RI basins No. 2 through 4 may be utilized while still meeting the buffer distance requirements, and no portion of RI basin No. 1 may be utilized when infiltrating Class D water. The buffer distances for Class D water which impact the RI basins is depicted graphically on **Figure 5-1**.



Note: Contours were generated from Google Earth and are approximate.

V:\GIS\Projects\Idaho City\Facility Map.mxd



FIGURE 5-1  
CLASS D REUSE 200 FOOT BUFFER DISTANCE  
IDAHO CITY PLAN OF OPERATIONS

## 5.5 Reuse Distribution System

Compliance activity CA-108-05 required the submittal of plans for a recycled water distribution system on the RIBs. Previously the distribution system did not meet the requirements for even distribution of recycled water as identified in IDAPA 58.01.17.613.01.c. Plans were submitted and IDEQ approval for a pilot test was received on August 2, 2017. The pilot test was instituted in RIB No. 3. It was observed for a period of one year. An evaluation letter of the effectiveness of the pilot test was submitted to IDEQ and approval of installation of distribution systems in RIB No. 2 and 4 was received on April 10, 2019. **Table 5-7** summarizes O&M activities included during normal operation of the reuse distribution system.

**Table 5-7: Reuse Distribution System O&M Activities During Normal Operation**

O&M Activity	Frequency
Check for piping for flow and possible obstructions. Remove obstructions as necessary.	Daily
Verify distribution system is achieving even distribution in the areas installed	Daily

## 5.6 Equipment Maintenance

Equipment maintenance can be broadly classified as preventative maintenance or corrective maintenance. Corrective maintenance involves the repair of equipment after breakdown or failure. Preventative maintenance involves the upkeep of equipment and processes as to prevent breakdown or failure. The general maintenance activities related to each treatment process are identified above. For specific repair and maintenance activities refer to the manufacturer's equipment manuals and drawings located in the control building. The maintenance activities identified should be tracked using a maintenance record log that identifies the following:

- Type and location of equipment;
- Maintenance needs;
- General maintenance schedule;
- Method for reordering equipment or spare parts.

A maintenance journal is kept by the operations staff. The journal tracks maintenance activities. The date, time, and description of maintenance is included in the journal.

### 5.6.1 Spare Parts

Spare parts and equipment for the treatment and reuse system are housed in the control building. The Public Works Director is responsible for contacting the appropriate vendors and suppliers when ordering spare parts and chemicals.

### 5.6.2 Manufacturer's Operation and Maintenance Manuals

Manufacturers operation and maintenance manuals are maintained for all major system equipment are housed in the control building.



## 5.7 Emergency Operations

In general, emergency responses are initiated through a call from a City representative, and may include power failures, natural disasters and equipment/process failures. It is the sole responsibility of the on-call operator to answer and respond to any emergency callouts. There are two ways an emergency situation can be initiated:

1. A callout can be initiated by a notification directly from a customer or City representative, where one of the aforementioned parties directly or indirectly notifies facility staff of an issue. Emergency responses can be initiated by contacting:
  - During daytime or after-hours the Public Works Director – Tami Claus at 208-984-0724

Common emergency situations are identified below. The procedures detailed in these sections along with the general information provided above serves as the “Emergency Operating Plan,” depending upon the situation. In case of an emergency, emergency contact information can be found in **Table 5-8** and **Table 5-9**.

**Table 5-8: Emergency Contact Information**

Person/Agency	Phone Number
EMERGENCY	911
Boise County Sheriff’s Office/Dispatch	(208) 392-4411
Boise County Emergency Management	(208) 392-4431
City of Idaho City	
Tami Claus – Public Works Director	(208) 984-0724 cell
Nancy Ptak – City Clerk	(208) 392-4584 office
State Communication Center (Emergency Response)	(800) 632-8000
IDEQ - Staff Engineering - Boise Regional Office - Dan Smith, P.E.	(208) 373-0550
Idaho Transportation Department	(208) 334-8000

**Table 5-9: Contractor/Supplier Contact Information**

Contractor/Supplier	Phone Number
Mountain Waterworks (Engineer)	(208) 780-3990
AME Electric (Electrician)	(208) 459-8959
Master Rooter (Plumber)	(208) 888-9191
Northwest Power systems (Generator Service and Repair)	(208) 378-6562
Rocky Mountain Valves (Valve Service)	(208) 953-7682
NC Services (Invasive Aquatic Weed Control)	(208) 938-8092
Analytical Laboratories, Inc. (Sample Analysis)	(208) 342-5515
Rain for Rent (Emergency Bypass Pumping)	(208) 914-4068
Riverside Inc. (Emergency Pump Service)	(208) 722-6731
Instrument Technologies (Flow Meter Verification)	(208) 376-4502
Secor Construction (Earthwork Contractor)	(208) 392-4443

### **5.7.1 Power Failure**

In the event of power failure adhere to the following procedure:

1. Verify that the emergency generator has started;
2. Make sure lift station pumping and equipment are functional;
3. Start investigating the cause and or source of the power outage;
4. If an Idaho Power line failed, call their emergency phone number to have power restored;
5. If the power failure was not caused by Idaho Power equipment, the response crew will call the operator;
6. An entry into the plant log will be made and the outage reported to City Council;
7. Refer to **Table 5-8** and **Table 5-9** for contact information.

### **5.7.2 Equipment Failure**

In the event of equipment failure adhere to the following procedure:

1. Response crew will verify that stand-by equipment is functioning;
2. Response crew will trouble shoot the equipment failure;
3. If source of the problem is within the capabilities of the response crew, the situation will be resolved and the equipment placed back in line. A report to the Operator for follow-up will be initiated, the Operator will verify the corrective action and will take steps to prevent the situation from re-occurring;
4. An entry into the plant log will be made and the equipment failure reported to Idaho City Council;
5. Equipment operation and repair manuals are located in the Control Building.
6. Refer to **Table 5-8** and **Table 5-9** for contact information.

### **5.7.3 Sewer Line Back-Up**

In the event of a sewer line back-up adhere to the following procedure:

1. Operator will contact Master Rooter to respond to the back-up;
2. If Master Rooter is unavailable, Roto-Rooter will be called;
3. If Roto-Rooter is unavailable, calls will be made from the phone book to locate a company that can respond;
4. An entry into the plant log will be made and the back-up reported to Idaho City Council;
5. Affected Customers need to be notified;
6. Refer to **Table 5-8** and **Table 5-9** for contact information.

### **5.7.4 Emergency Digs**

If an emergency dig is required adhere to the following procedure:

1. The Public Works Director will utilize City equipment to perform the emergency dig;
2. If City equipment is unavailable, Secor Constructon will be contacted;
3. If Secor Construction is unavailable, an excavation company will be located by using the local directory;

4. Refer to **Table 5-8** and **Table 5-9** for contact information.

### 5.7.5 Odor Complaints

If an odor complaint is filed adhere to the following procedure:

1. An immediate investigation of the odor complaint will be done;
2. Information related to the type of odor, location, wind direction and weather conditions would be obtained;
3. Steps to correct the odor problem will be taken immediately;
4. An entry into the plant log will be made and the odor complaint reported to Idaho City Council;
5. Refer to **Table 5-8** and **Table 5-9** for contact information.

### 5.7.6 Serious Personal Injury, Fire, or Imminent Danger

In the event of serious personal injury, fire, or imminent danger, adhere to the following procedure:

1. Immediately call for **Emergency Services, 911**;
2. Unless the victim needs immediate help and the operator can provide that help without endangering himself, the operator needs to withdraw to safe area.
3. Contact Responsible Official (Idaho City Mayor) and relay information as available;
4. An entry into the plant log will be made and the injury reported to Idaho City Council;
5. Refer to **Table 5-8** and **Table 5-9** for contact information.

### 5.7.7 Natural Disasters

If a natural disaster is imminent, determine the severity of the disaster and adhere to the corresponding procedure:

- In case of immediate threat to life or property:
  - a. Call **Emergency Services, 911**;
  - b. Contact Responsible Official (Idaho City Mayor) and relay information as available;
  - c. An entry into the plant log will be made and the disaster reported to Idaho City Council;
- In case of a quickly developing pending natural disaster such as a thunderstorm:
  - a. The operator should prepare the WWTF as time permits and take shelter;
  - b. Contact Responsible Official (Idaho City Mayor) and relay information as available;
  - c. An entry into the plant log will be made and the disaster reported to Idaho City Council;
- In case of a slow developing natural disaster:
  - a. The operator should consult with the owner to decide the best course of action;
  - b. Contact Responsible Official (Idaho City Mayor) and relay information as available;
  - c. An entry into the plant log will be made and the disaster reported to Idaho City Council;
- Refer to **Table 5-8** and **Table 5-9** for contact information.

## 5.8 Common Operational Problems

Troubleshooting recommendations for common operational problems are included in the following sections. These recommendations are not intended to be complete guides to resolving operational problems but serve as a place to begin the investigation. If the problem cannot be resolved using these recommendations resort to the system operation and maintenance manual or the specific equipment O&M manual for the equipment of concern located in the control building.

### 5.8.1 Performance-Related Operating Troubles

Poor effluent quality may be caused by the following:

- Overloading;
- Low ambient temperatures;
- Ice formation;
- Toxic materials in influent;
- Nutrient-deficient industrial wastes;
- Short-circuiting;
- Loss of liquid volume because of sludge deposition, leakage, or evaporation;
- Aeration equipment malfunction;
- Interference with light penetration by excess turbidity from storm flows or by algal mats and scum;

### 5.8.2 Environmental Nuisances

Environmental nuisances may be caused by:

- Odors caused by anaerobic conditions in the bulk liquid, scum or sludge deposits;
- Foaming and spray, in the case of aerated lagoons, from the agitation caused by the aerators;
- Insect generation;
- Groundwater contamination caused by leakage through the lagoon liner bottom or sides.
- Low Temperatures.
  - Low ambient temperatures are beyond the control of the operator and are design considerations. When two or more cells are available, series operation may be used during cold weather to enhance the effluent quality.

### 5.8.3 Hazardous Conditions

Hazardous conditions may be caused by:

- Bank or dike erosion caused by runoff against the exterior surface;
- Burrows of muskrats and other small wildlife;
- Root growths from woody plants and trees that furnish pathways for leakage;
- Toxic Materials.

- Toxic materials in the influent ordinarily are not a problem that can be solved at the lagoon. Industrial wastes especially heavy and transition metals are likely to be responsible for toxic effects, and these wastes are best controlled at the source. Although certain organic materials, especially pesticides, can cause toxic effects, the lagoon biota have a surprising ability to degrade and assimilate such material, especially after an acclimation period.

#### 5.8.4 Odors

- Odors may occur when there are anaerobic conditions in the liquid sludge layers or scum. The septic sludge or scum should be broken up and re-suspended in the liquid by using such devices as a fire hose, a long handled wooden paddle, or an outboard motor. Repeated attempts to break up the sludge mat may be necessary because the mat may tend to re-form. Increasing aeration time to provide more dissolved oxygen in the affected cell should be one of the first steps in deterring odor incidents. If extra lagoon capacity is available, it sometimes may be sufficient to "rest" a cell that is having an odor problem by temporarily halting inflow to the offending cell.
- Odors commonly occur for a few days in aerobic and facultative ponds at certain seasons (especially at the time of the spring that) even in well-operated lagoons. Special odor control action normally is warranted only if the odor persists for extended periods or occurs at other times.
- Odors also may occur in nominally aerobic or facultative lagoons in connection with algal "blooms", that is, sudden and extreme algal growth. These blooms commonly consist of blue- green algae. These algae normally emit a certain amount of odor. However, the die-off of the algal bloom occurs with rapidity equal to the growth of the bloom itself. The dead algae then furnish an extremely large and sudden BOD load to the lagoon, frequently making an aerobic lagoon go anaerobic and causing odor problems. The bloom may be halted chemically by the use of copper sulfate or certain herbicides.

## 5.9 Process Control

Laboratory tests for pH and chlorine residual are conducted on site by the operations staff to control treatment processes. Each test should be performed according to the schedule in **Table 5-10**, or treatment process is experiencing poor performance.

**Table 5-10: Laboratory Tests Used for Process Control**

Test	Method	Purpose	Testing Schedule	Process
Chlorine Residual	SM 8021	Verify chlorine residual for disinfection	Daily	Disinfection
pH	EPA 150.1	Process control	Daily	Disinfection

## 5.10 Backflow Testing

Reuse facilities with existing or planned cross-connections or interconnections between the recycled water system and any water supply (potable or nonpotable) or surface water, shall have backflow prevention assemblies, devices, or methods as required by applicable rule or as specified in this permit and approved by DEQ.

For public water systems, backflow assemblies shall meet the requirements of IDAPA 58.01.08.543. Assemblies shall be adequately maintained and shall be tested annually by a certified backflow assembly tester and repaired or replaced as necessary to maintain operational status.

Records of all testable backflow assembly test results, repairs, and replacements shall be kept at the reuse facility along with other operational records and shall be discussed in the annual report and made available for inspection by DEQ. Other approved means of backflow prevention, such as siphons and air-gap structures that cannot be tested, shall be maintained in operable order.

## Section 6      **SITE MANAGEMENT**

### **6.1 Compliance Activities**

#### **6.1.1 CA-108-01 – Plan of Operation (PO)**

Within 12 months of permit issuance, the permittee shall submit to IDEQ for review and approval a Plan of Operation (PO) that reflects current operations and incorporates the requirements of the permit. The PO shall comply with the applicable requirements stated in IDAPA 8.01.17.300.05 and shall address applicable items in the most current PO Checklist available. Compliance activity CA-108-01 is ongoing.

#### **6.1.2 CA-108-02 – Quality Assurance Project Plan (QAPP)**

Within 12 months of permit issuance, the permittee will prepare and implement a QAPP that incorporates all monitoring and reporting required by this permit. A copy of the QAPP along with written notice that the permittee has implemented the QAPP will be provided to IDEQ. The permittee will follow the QAPP when collecting, analyzing, and reporting monitoring data submitted to IDEQ. The QAPP will be designed to assist in planning for collecting, analyzing, and reporting all monitoring in support of this permit and in explaining data anomalies when they occur. At a minimum, the QAPP will include the following:

1. Details on the number of measurements, number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
2. Maps indicating the location of each monitoring and sampling point.
3. Qualification and training of personnel.
4. Names, addresses, and telephone numbers of the laboratories used by or proposed to be used by the permittee.
5. Example formats and tables that will be used by the permittee to summarize and present all data in the annual report. The format and content of the QAPP should adhere to the recommendations and references in the Quality Assurance and Data Processing sections of the reuse guidance.

Compliance activity CA-108-02 is ongoing.

#### **6.1.3 CA-108-03 – Fencing and Signage Maintenance**

The permittee shall repair all broken fencing and signage around the wastewater treatment plant and reuse site in compliance with Section 4.5 of this Permit. The permittee shall notify IDEQ when the repairs have been completed.

#### **6.1.4 CA-108-04 – Lagoon Seepage and RIB Impact Assessment**

Within six months of permit issuance, the permittee will submit a Monitoring Objectives Plan (Plan) for IDEQ review and approval. The permittee will use EPA's Data Quality Objectives Process to design the Plan. The Plan will include the following elements:

- A description of how the permittee will determine if lagoon seepage and RIB use and operations are impacting surface water and groundwater. This assessment shall include data and statistical analysis methods that will be used to establish any surface water or groundwater degradation.
- Surface water and groundwater data thresholds (numerical and/or narrative) to establish when impacts are considered degradation.
- Within four years of permit issuance, the permittee shall submit a Surface Water and Ground Water Impact Assessment Report (Report) to IDEQ for review and acceptance. The Report shall include all collected data, provide conclusions based on the objectives set forth in the approved Plan and the aquifer properties determined in CA-108-05. In addition, the Report shall provide recommendations to address any identified degradation. Within 30 days of Report submittal the permittee would request a meeting with IDEQ to discuss Report findings and recommendations.

#### **6.1.5 CA-108-05 – Determine Aquifer Properties**

Within six months of permit issuance, the permittee shall submit to IDEQ for review and approval, a plan for characterizing hydraulic conductivity, gradient, and effective porosity beneath the reuse site. The plan shall specify methodology, timing of aquifer testing, and seasonal low and high water levels. An aquifer properties characterization report shall be submitted to IDEQ for review and approval within 12 months of the plan approval.

#### **6.1.6 CA-108-06 – MU-108-02 Lateral Distribution System Installation**

Within 12 months of permit issuance, the permittee will submit plans for a recycled water distribution system to IDEQ, sealed by an Idaho licensed professional engineer, to be installed on MU-108-02. The distribution system will meet the requirements for even distribution of recycled water set forth in the Idaho Recycled Water Rules, IDAPA 58.01.17.613.01.c. The plan will include repairs to the MU-108-02 recycled water line and be consistent with the lateral distribution system design installed on MU-108-03 and MU-108-04.

Within three months of IDEQ approval of the distribution system plans, the permittee will complete repairs and construct the lateral distribution system and begin using MU-108-02 for recycled water applications. The City has constructed improvements to MU-108-02 in accordance with previously submitted and approved plans and will submit Record Drawings.



### **6.1.7 CA-108-07 - Pre-Application Workshop**

If the permittee intends to continue operating the reuse facility beyond the expiration date of this permit, the permittee will contact IDEQ and schedule a pre-application conference at least 12 months prior to the expiration date of the permit to discuss the compliance status of the facility and the content required for the reuse permit application package.

### **6.1.8 CA-108-07 – Renewal Permit Application**

At least six months prior to permit expiration, the permittee will submit to IDEQ a complete permit renewal application package that fulfills the requirements specified in CA-108-07 and identified at the pre-application conference.

## **6.2 Rapid Infiltration Basin Management**

### **6.2.1 Hydraulic Loading**

The hydraulic loading of the RI basins is limited to the infiltrative capacity of the basins. Since the RI basins are constructed above very permeable soil, with estimated infiltration rates potentially up to 20 inches per hour. The soils beneath the RIBs consist of gravel and cobble tailings left over from decades of dredge mining in the region. These soils have demonstrated high infiltration rates. Hydraulic loading for the previous five years for each RI basin is provided in **Table 4-3**.

### **6.2.2 Nutrient Loading**

Constituent loading is calculated for nitrogen and phosphorus with a maximum concentration and maximum application in pounds per year for the RI basins. Nitrogen and phosphorus loading are tabulated in the annual report, based on monthly effluent nitrogen and phosphorus concentrations. Nutrient loading for the previous five years is provided in **Table 4-4**.

### **6.2.3 Runoff Management**

RI basins are surrounded by an approximate 2- to 3-foot-high berm on all sides to contain runoff from the basins. However, due to the high infiltration capacity of the soil, ponding or runoff has not been observed by the operator.

### **6.2.4 Vegetation Management**

Due to rapid infiltration of recycled water, vegetation growth in the RI basins has historically been very limited. However, the City Public Works Director shall periodically remove vegetation from RI basins as necessary.

### **6.2.5 RIB Dosing Schedule**

Basin rotation occurs on an approximate weekly basis from approximately April 1 through October 31, with rotation increasing to approximate 2-week rotations from approximately November 1 through March 31. Currently only RI basins No. 2, 3, and 4 are utilized. This dosing schedule results in loading of each basin for a period of approximately 7 to 14 days followed by a rest period of 14 to 28 days. This rotation schedule has not resulted in observed ponding by the operator.

### **6.2.6 Buffer Distances**

While producing Class D water, buffer distances shown in **Figure 5-1** must be adhered to. Considering these buffer distances, the City has historically not used RI basin No. 1 as the majority of the basin is within the 200 foot buffer distance from inhabited dwellings.

## **6.3 Site Operations and Maintenance**

The City of Idaho City system is comprised of Class 2 treatment and Class 1 collection system facilities, as per the Reuse Permit Documentation. The system is also be classified as a Land Application system as per the Reuse Permit. The City will maintain licensed Contact Operations with Idaho Rural Water Association holding responsible and substitute responsible charge operators with a current active Class 2 licensure or above.

## Section 7 **MONITORING ACTIVITIES**

### 7.1 Recycled Water Monitoring

**Table 7-1** summarizes the monitoring requirements of the recycled water. It is the responsibility of the Public Works Director to monitor the volume of reuse that is applied to basin. This includes:

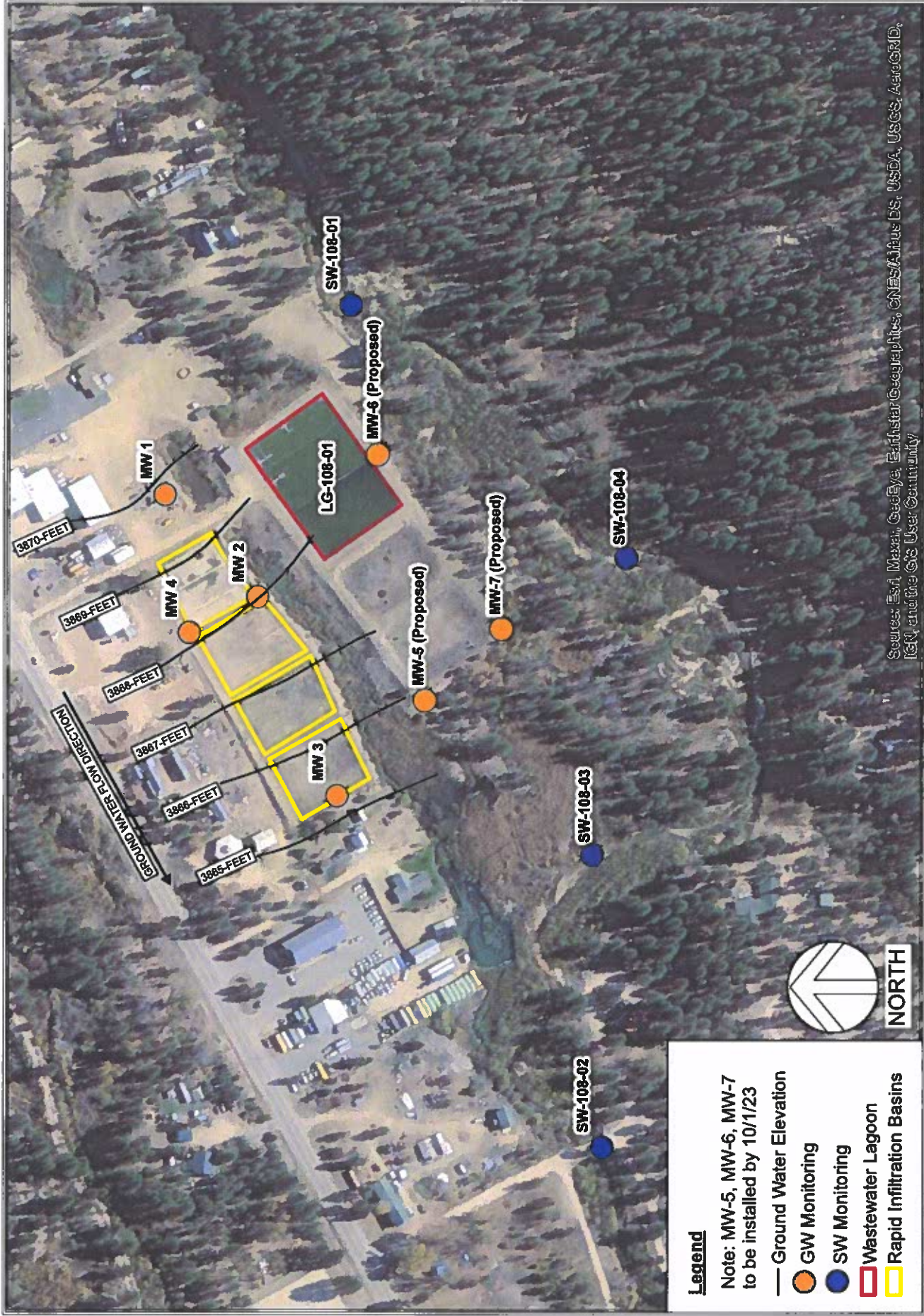
- Read and record the readings on each of the reuse flow meter (gallons).
- Read and record meter and pumped flow from supplemental irrigation water source.
- Observe and record onto which fields (HMU and Segment number) the sprinklers are applying water.

**Table 7-1: Monitoring Requirements of Recycled Water**

Monitoring Point, Unit, or Flow Measurement Serial Number and Location	Sample Description	Sample Type and Frequency	Constituents (mg/L) and Measured Parameters
WW-108-01	Recycled water from LG-108-01 to all RIBs	Grab sample: Monthly	Total Kjeldahl nitrogen Nitrate+nitrite-nitrogen Ammonia nitrogen Total phosphorus pH (Standard Units) Chloride Total coliform organisms/100mLa Total residual chlorine
FM-108-01 Ultrasonic flow level measurement and V-notch weir at LG-108-01 outlet	Recycled water flow from LG-108-01 to all RIBs	Daily meter reading Monthly compilation of data	Volume (MG/month) Volume (gallons/day)
FM-108-02 Clamp on ultrasonic flow meter on influent line	Wastewater influent to LG-108-01	Daily meter reading Monthly compilation of data	Volume (MG/month)

### 7.2 Groundwater and Surface Water Monitoring

It is the responsibility of the Public Works Director to conduct groundwater monitoring quarterly in February, May, August, and November as summarized in **Section 3.3.2** of this document. Additionally, surface water monitoring, as discussed in **Section 3.3.1** of this document is required on a monthly basis. Monitoring locations are shown on **Figure 7-1**.



Legend  
 Note: MW-5, MW-6, MW-7 to be installed by 10/1/23  
 — Ground Water Elevation  
 ● GW Monitoring  
 ● SW Monitoring  
 ■ Wastewater Lagoon  
 ■ Rapid Infiltration Basins

SW-108-01  
 MW-5 (Proposed)  
 LG-108-01  
 MW-5 (Proposed)  
 MW-7 (Proposed)  
 SW-108-04  
 SW-108-03  
 SW-108-02

3870-FEET  
 3869-FEET  
 3868-FEET  
 3867-FEET  
 3866-FEET  
 3865-FEET

GROUND WATER FLOW DIRECTION

0 125 250 500 750 1000 Feet

NORTH

Mountain WATERWORKS

VGISProjects\I\_L\_Proj\cstidaho City\Proposed Monitoring Locations.mxd

Sources: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FIGURE 7-1  
 SURFACE WATER AND GROUND WATER MONITORING LOCATIONS  
 IDAHO CITY PLAN OF OPERATIONS

## Section 8 **RECORDS AND REPORTS**

A land application annual report must be prepared and submitted to the IDEQ. The Public Works Director is responsible for record keeping, preparation of the annual report, and submittal to the IDEQ. All monitoring data and copies of the annual report will be kept for the duration of the active permit plus two years. The annual land application report will include the following items and be submitted to the IDEQ no later than January 31 of each year. The report shall be prepared by a competent environmental professional and include calculations and results for the following parameters:

- Annual wastewater flow to each HMU. Report in MG/month for each month of application for each HMU.
- Recycled water nitrogen and phosphorus loading rates. Report in pounds/year.
- RI basin distribution including dates each RI basin is active and total days per year each RI basin is active.

### **8.1 Record Keeping**

#### **8.1.1 Record Storage**

Records are stored onsite at the Control Building. The following records are stored electronically: Annual Reports, Maintenance Logs, Sample Reports, Historical Logs, and Engineering Information. The Control Building provides a secure and weather protected environment. The following records are kept onsite: equipment O&Ms, chain of custody for delivered samples, safety data sheets, chemical inventory, Computerized Maintenance Management System Program (online), annual Flows, IWRs, constituent loading information, and influent flows.

#### **8.1.2 Record Creation**

Daily logs are used to collect flow data for the system. Each year the composite data is used to generate an annual report to be submitted to the IDEQ for review. A blank copy of the daily log and the irrigation system data management spreadsheet is included as **Appendix B**.

All recycled water, groundwater, and surface water testing required under the reuse permit is done by a 3rd party laboratory. The laboratory performs the tests, per the methods identified in the QAPP, and reports the results in a laboratory report. An example chain of custody and laboratory report are included in **Appendix B**.

## 8.2 Violation and Accident Reporting

Upon discovery of a permit violation or accident likely to cause a permit violation in the future, the operator must immediately contact the IDEQ Boise Regional Office through email or at (208)-373-0550.

In case of an emergency call the IDEQ's emergency 24-hour number at (800) 632-8000.

All instances of:

1. Permit non-compliance, which may endanger public health or the environment; and
2. Unauthorized discharges to surface waters of the State of Idaho

shall be reported to the IDEQ BRO by telephone or email within 24 hours from the time the permittee becomes aware of the discharge. A written follow-up shall be provided to the IDEQ BRO within 5 days from the time the permittee became aware of the permit non-compliance or unauthorized discharge. Reporting of unauthorized discharges to surface waters of the United States will require a call to the IPDES Hotline at 1-833-473-3724.

IDEQ Contact Information

**Compliance, Inspection, and Enforcement Lead**  
**1410 N. Hilton Street**  
**Boise, Idaho 83706**

## Section 9 SAFETY

### 9.1 General

#### For your protection:

- Learn the location of safety equipment and how to use it;
  - General personal protective equipment required at the plant includes safety glasses and rubber gloves. All employees have their personal safety glasses, and disposal rubber gloves are located in the Control Building.
- Learn and follow safety rules;
- Be alert in all areas.

#### In case of injury:

- All injuries even scratches of skin abrasions must be reported and first aid given.
- Contact your immediate supervisor and owner's representative.

### 9.2 Safety Rules and Regulations

#### 9.2.1 Standard Practices

- Wear a hard hat when using overhead equipment.
- Operator should have a cell phone or other means of summoning immediate assistance whenever and wherever they are onsite.
- Keep all areas clear and clean. Pick up all loose objects, tools, trash, ladders, hoses, etc.
- Clean up all spills.
- Wash hands after working on or operating plant equipment;
- Wear gloves when working on or with sewage equipment or collecting samples;
- Use common sense when moving or lifting heavy objects.
- Use proper equipment;
- Lift with your legs, not your back;
- Get extra help when needed.
- Use caution when working on or around the liners. Liners are slippery when wet.
- Never work on equipment without:
  - Locking it out at the push button or circuit breaker;
  - Tagging the main circuit breaker.
- Material Safety Data Sheets. Adjacent to the operator's desk in the Control Building is the MSDS notebook. This book provides safety information for chemicals and reagents used on site. This notebook should be reviewed and updated annually.
- Know locations of fire extinguishers and how to use them.
- Don't work alone in manholes! It takes two people for work in manholes.
- Use a safety harness;
- Use barricades for open manholes.

- If something is out of place or not working, fix it;
- Examples include equipment guards not in place, ladders and similar items in poor repair, and safety equipment not in useable condition.
- It is everyone's responsibility to report, immediately, any safety hazard or unsafe condition to their supervisor.

### **9.2.2 Maintenance Safety**

The following rules apply whenever working on equipment:

- Lock out and tag main switch to prevent accidental starting.
- When working on pumps, fully close discharge valves and tag them.
- Maintenance on equipment in operation is to be limited to APPROVED lubrication, packing adjustment or minor repair.

### **9.2.3 Electrical Safety**

- Lock out and tag main switch of electrical equipment before working on it.
- Do not remove tag without first checking with person who initiated the tag.
- Report and log any unusual motor temperature, noise vibration, etc.

### **9.2.4 Employee's Personal Injury Report**

All accidents resulting in bodily injury should be reported. A written report should be submitted to the City Council.

### **9.2.5 Risk Assessment/Work Plan**

The supervisor should prepare a risk assessment/work plan for any non-routine or inherently hazardous work that he and/or his crew is about to perform. The plan should list the potential risks associated with the work and define the equipment (including personal protective equipment) and procedures that will be followed to mitigate the risks. These plans should be filed and kept in the plant records.

### **9.2.6 Gaseous Chlorine Safety**

- Gas chlorination equipment and chlorine cylinders shall be housed in a building. If this building is used for other purposes, a gas-tight room shall separate this equipment from any other portion of the building.
- Floor drains from the chlorine room shall not be connected to floor drains from other rooms. Doors to this room shall open only to the outside of the building and shall be equipped with panic hardware. Rooms shall permit easy access to all equipment.
- Respiratory air-pac protection equipment shall be available where chlorine gas is handled, and shall be stored at a convenient location, but not inside any room where chlorine is used or stored. Instructions for using the equipment shall be posted.



### 9.2.7 First Aid for Chlorine Exposure

- Operators should have proper first aid training.
- For eye contact, inhalation, ingestion, or skin contact causing burn or irritation, have medical assistance summoned immediately.
- If patient has *inhaled* mist or gas, treat for this first.
  - If chemical is inhaled, remove patient from the contaminated area to fresh air as quickly as possible.
  - If the patient is breathing, place on back with head and back slightly elevated in a comfortable position. Keep the patient warm and at rest. CALL A PHYSICIAN IMMEDIATELY.
  - If breathing has ceased, IMMEDIATELY start artificial respiration using Holger Nielson (back pressure-arm lift) method. Do not use mouth-to-mouth method.
- *Eye exposure* to liquid or mists should be treated by flushing immediately with eyewash for at least 15 minutes. Hold eyelids apart to ensure maximum flushing of exposed areas. Do not attempt to neutralize with chemicals. Do not apply any medication unless prescribed by physician.
- In case of *skin contact*, flush immediately using drench spray head for at least 15 minutes.
- Throat irritation, in mild cases, can be relieved with milk. Do not give any drugs unless prescribed by physician.
- If chemical is *swallowed*, do not induce vomiting. If patient is fully conscious, give plenty of water to drink.

## 9.3 Hazardous Areas

### 9.3.1 Pump Station

When required to enter a confined space or sump, observe the following basic rules for your protection:

- Provide adequate ventilation to remove gases and to supply oxygen.
- Never enter either place alone. Always have someone to help in the event of trouble.
- Use safety harness equipped with safety line.
- Check for gases with explosive meter.
- Be very careful about footing.
- Use bucket and rope to lower tools and equipment.
- Good housekeeping is essential.

# Appendix A

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IDEQ Idaho City Reuse Permit M-108-04

*2023 Updated Plan of Operations*

# Idaho Department of Environmental Quality Reuse Permit M-108-04

(Previous Permit No. M-108-03)

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The City of Idaho City (hereafter "permittee") is hereby authorized to construct, install, and operate a reuse facility in accordance with (1) this permit; (2) IDAPA 58.01.17 "Recycled Water Rules"; (3) an approved plan of operation; and (4) all other applicable federal, state, and local laws, statutes, and rules. This permit is effective from the date of signature and expires on July 26, 2027.



7/25/2022

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Signature

---

Date

---

Aaron Scheff

Regional Administrator  
Boise Regional Office  
Idaho Department of Environmental Quality

Idaho Department of Environmental Quality  
Boise Regional Office  
1445 North Orchard  
Boise, Idaho 83706-2239  
(208) 373-0550

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## 1. Common Acronyms/Abbreviations and Definitions

CA	compliance activity
DEQ	Idaho Department of Environmental Quality
director	DEQ director or designee unless otherwise specified
FM	prefix for flow measurement/monitoring location, device, or method reporting serial number
GW	prefix for ground water reporting serial number
IDAPA	Numbering designation for all administrative rules in Idaho promulgated according to the Idaho Administrative Procedure Act
IDWR	Idaho Department of Water Resources
IPDES	Idaho Pollutant Discharge Elimination System
LG	prefix for lagoon reporting serial number
material change	a change in a document required by this permit that would impact DEQ's ability to ensure compliance and protect human health and the environment
µmhos/cm	micromhos per centimeter
MG	million gallons
mg/L	milligram per liter
mL	milliliter
MU	management unit, prefix for management unit reporting environmental serial number
NPDES	National Pollutant Discharge Elimination System
N	nitrogen
ppm	parts per million
P	phosphorus
PO	plan of operation
QAPP	quality assurance project plan
responsible official	facility contact person authorized by the permittee to communicate with DEQ on behalf of the permittee on any matter related to the permit, including without limitation, the authority to communicate with and receive notices from DEQ regarding notices of violation or non-compliance, permit violations, permit enforcement, and permit revocation. The responsible official provides written certification of permit application materials, annual report submittals, and other information

submitted to DEQ as required by the permit. Any notice to or communication with the responsible official is considered a notice to or communication with the permittee. The responsible official may designate an authorized representative to act as the facility contact person for any of the activities or duties related to the permit, except signing and certifying the permit application, which must be done by the responsible official. The authorized representative shall act as the responsible official and shall bind the permittee as described in this definition. Designation of the authorized representative shall follow the requirements specified in section 6.1.3 of the permit.

RIB

Rapid infiltration basin

yr

year



## 2. Facility Information

Information Type	Information Specific to This Permit
Classes of recycled water	Class D Municipal (or Class C – if permittee conducts increased sampling and disinfection requirements per Section 4.5 and 5.1)
Method of treatment and reuse	A single aerated lagoon followed by chlorine disinfection and four rapid infiltration basins (RIBs)
Collection and treatment system classification	Wastewater collection system classification: Class I Wastewater treatment system classification: Class II Land Application/Reuse
Facility location	Located at the end of an unnamed road to the south of ID-21, between the US Forest Service's Ranger Station (3833 ID-21) and the Boise County Department of Motor Vehicles building (3851 ID-21), in Idaho City, Idaho.  Township 6N, Range 5E, Section 26 43 49' 19" N and 115 50' 23" W
Facility mailing address	P.O. Box 130 Idaho City, Idaho 83631
Facility responsible official and authorized representative	<u>Responsible Official:</u> Kenny Everhart – Mayor Phone: (208) 392-4584 Email: <a href="mailto:idahocitypublicworks@gmail.com">idahocitypublicworks@gmail.com</a>  <u>Authorized Representative</u> Tami Claus – City Wastewater Technician Email: <a href="mailto:idahocitypublicworks@gmail.com">idahocitypublicworks@gmail.com</a>  Notify DEQ within 30 days if a change in personnel occurs for the Responsible Official. DEQ will issue a minor permit modification to confirm the change.
Ground water	There are multiple aquifers beneath the reuse site separated by intermittent clay layers. First water is encountered 6 to 12 feet below the reuse site. Nearby domestic and public water supply wells are drilled in deeper water zones (30 to 400 feet below the ground surface).
Surface water	Mores Creek is located 420 feet to the southwest of the closest RIB and 160 feet to the southeast of LG-108-01.  Beneficial Uses: Cold water communities, salmonid spawning, primary contact recreation, and domestic water supply (IDAPA 58.01.02.140.10.SW-9). Also, agricultural water supply, industrial water supply, wildlife habitats, and aesthetics (IDAPA 58.01.02.100.03, 04, and 05).  An unnamed drainage channel, which flows to Mores Creek, runs between the RIBs and LG-108-01. It is located 20 feet to the southeast of the RIBs.

### 3. Compliance Schedule for Required Activities

Compliance Activity (CA) Number and Completion Due Date	Compliance Activity Description
<p>CA-108-01                      Within 12 months of permit issuance</p>	<p><b>Updated Plan of Operation (PO):</b> The permittee shall submit to DEQ for review and approval a PO that reflects current operations and incorporates the requirements of this permit. The PO shall comply with the applicable requirements stated in IDAPA 58.01.17.300.05 and shall address applicable items in the most current PO Checklist available.</p> <p>The PO shall be updated as needed to reflect current operations. The permittee shall notify DEQ of material changes to the PO and copies shall be kept on site and made available to DEQ upon request.</p>
<p>CA-108-02                      Within 12 months of permit issuance</p>	<p><b>Updated Quality Assurance Project Plan (QAPP):</b> The permittee shall prepare and implement a QAPP that incorporates all monitoring and reporting required by this permit. A copy of the QAPP along with written notice that the permittee has implemented the QAPP shall be provided to DEQ. The permittee shall follow the QAPP when collecting, analyzing, and reporting monitoring data submitted to DEQ.</p> <p>The QAPP shall be designed to assist in planning for collecting, analyzing, and reporting all monitoring in support of this permit and in explaining data anomalies when they occur. At a minimum, the QAPP shall include the following:</p> <ol style="list-style-type: none"> <li>1. Details on the number of measurements, number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements</li> <li>2. Maps indicating the location of each monitoring and sampling point</li> <li>3. Qualification and training of personnel</li> <li>4. Names, addresses, and telephone numbers of the laboratories used by or proposed to be used by the permittee</li> <li>5. Example formats and tables that will be used by the permittee to summarize and present all data in the annual report</li> </ol> <p>The format and content of the QAPP should adhere to the recommendations and references in the Quality Assurance and Data Processing sections of the reuse guidance.</p> <p>The permittee shall amend the QAPP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAPP. The permittee shall notify DEQ of material changes to the QAPP and copies shall be kept on site and made available to DEQ upon request.</p>

Compliance Activity (CA) Number and Completion Due Date	Compliance Activity Description
CA-108-03 Within three months of permit issuance	<p><b>Fencing and Signage Maintenance:</b> The permittee shall repair all broken fencing and signage around the wastewater treatment plant and reuse site in compliance with Section 4.5 of this Permit. The permittee shall notify DEQ when repairs have been completed.</p>
CA-108-04 As specified	<p><b>Lagoon Seepage and RIB Impact Assessment:</b> Within six months of permit issuance, the permittee shall submit a monitoring objectives plan (Plan) for DEQ review and approval. It is recommended the permittee use EPA's Data Quality Objectives Process to design the Plan. The Plan shall include the following elements:</p> <ul style="list-style-type: none"> <li>• A description of how the permittee will determine if lagoon seepage and RIB use and operations are impacting surface water and ground water. This assessment shall include data and statistical analysis methods that will be used to establish any surface water or ground water degradation.</li> <li>• Surface water and ground water data thresholds (numerical and/or narrative) to establish when impacts are considered degradation.</li> </ul> <p>Within four years of permit issuance, the permittee shall submit a surface water and ground water impact assessment report (Report) to DEQ for review and acceptance. The Report shall include all collected data, provide conclusions based on the objectives set forth in the approved Plan and the aquifer properties determined in CA-108-05. In addition, the Report shall provide recommendations to address any identified degradation. Within 30 days of Report submittal the permittee must request a meeting with DEQ to discuss Report findings and recommendations.</p>
CA-108-05 As specified	<p><b>Determine Aquifer Properties:</b> Within six months of permit issuance, the permittee shall submit to DEQ for review and approval, a plan for characterizing hydraulic conductivity, gradient, and effective porosity beneath the reuse site. The plan shall specify methodology, timing of aquifer testing, and seasonal low and high water levels.</p> <p>An aquifer properties characterization report shall be submitted to DEQ for review and approval within twelve (12) months of the plan approval.</p>
CA-108-06 As specified	<p><b>MU-108-02 Lateral Distribution System Installation:</b> Within 12 months of permit issuance, the permittee shall submit plans for a recycled water distribution system to DEQ, sealed by an Idaho licensed professional engineer, to be installed on MU-108-02. The distribution system shall meet the requirements for even distribution of recycled water set forth in the Idaho <i>Recycled Water Rules</i>, IDAPA 58.01.17.613.01.c. The plan shall include repairs to the MU-108-02 recycled water line and be consistent with the lateral distribution system design installed on MU-108-03 and MU-108-04.</p> <p>Within three months of DEQ approval of the distribution system plans, the permittee shall complete repairs and construct the lateral distribution system and begin using MU-108-02 for recycled water applications.</p>

Compliance Activity (CA) Number and Completion Due Date	Compliance Activity Description
CA-108-07 At least 12 months prior to expiration date of this permit	<b>Pre-application Conference:</b> If the permittee intends to continue operating the reuse facility beyond the expiration date of this permit, the permittee shall contact DEQ and schedule a pre-application conference to discuss the compliance status of the facility and the content required for the reuse permit application package.
CA-108-08 At least six months prior to expiration date of this permit	<b>Permit Renewal Application:</b> The permittee shall submit to DEQ a complete permit renewal application package that fulfills the requirements specified in CA-108-07 and identified at the pre-application conference.

## 4. Permit Limits and Conditions

### 4.1 Management Unit Descriptions

Serial Number	Description	Irrigation System Type	Maximum Acres <sup>a</sup> Allowed
MU-108-01 <sup>b</sup>	RIB 1	Even Distribution	0.47
MU-108-02	RIB 2	Even Distribution	0.47
MU-108-03	RIB 3	Even Distribution	0.47
MU-108-04	RIB 4	Even Distribution	0.47
Total acreage			1.88

- a. Maximum acres represent the total permitted acreage of the MU as provided by the permittee. If the permittee uses less acreage in any season or year, then loading rates shall be presented and compliance shall be determined based on the actual acreage used during each season or year.
- b. Only Class C recycled water can be discharged to this RIB.

### 4.2 Hydraulic Loading Limits

Serial Number	Year Round <sup>a</sup> Hydraulic Loading Limit
MU-108-01 MU-108-02 MU-108-03 MU-108-04	Loading <sup>b</sup> must not exceed the infiltrative capacity of any basin.

- a. Record daily, as necessary, abnormal conditions as a result of nongrowing season application including ponding, excessive ice buildup, or runoff from the permitted site.
- b. The rotation schedules for RIB loading must be as specified in the DEQ-approved Plan of Operation.

### 4.3 Constituent Loading Limits

Serial Number	Maximum Concentration (mg/L) <sup>a</sup>		Annual Loading (pounds) <sup>a</sup>	
	Total Nitrogen	Total Phosphorus	Total Nitrogen	Total Phosphorus
MU-108-01 MU-108-02 MU-108-03 MU-108-04	30	6	5,200	765

- a. Compliance Activity CA-108-04 may show that these limits are not stringent enough and may need to be revised or replaced with a surface water discharge permit.

### 4.4 Management Unit Buffer Zones

Serial Number	Buffer Distances (feet) from Management Units					
	Public Water Supplies <sup>a</sup>	Private Water Supplies <sup>a</sup>	Inhabited Dwellings	Permanent and Intermittent Surface Water <sup>b</sup>	Irrigation Ditches and Canals	Areas Accessible to the Public
<i>For Class D Recycled Water</i>						
MU-108-01 MU-108-02 MU-108-03 MU-108-04	1,000	500	200	50	25	100
<i>For Class C Recycled Water</i>						
MU-108-01 MU-108-02 MU-108-03 MU-108-04	1,000	500	50	50	25	0

- a. Buffer zone distances apply unless a DEQ-approved well location acceptability analysis indicates an alternative buffer zone is acceptable.  
 b. The drainage channel located to the south of the RIBs is at an acceptable distance.

#### 4.5 Other Permit Limits and Conditions

Category	Permit Limits and Conditions
Application Season	All Year Round
Reporting year for annual loading rates	January 1 through December 31
Operator certification and endorsement	The wastewater treatment facility and reuse system must be operated by personnel certified and licensed in the State of Idaho wastewater operator training program at the operator class level specified in IDAPA 58.01.16.203 and properly trained to operate and maintain the system.
Disinfection limits in recycled water	<p>Class D: The median number of total coliform organisms shall not exceed 230 total coliform organisms/100 mL, as determined from the bacteriological results of the last three days for which analyses have been completed. No sample shall exceed 2,300 total coliform organisms/100 mL in any confirmed sample.</p> <p>Class C: The median number of total coliform organisms shall not exceed 23 total coliform organisms/100 mL, as determined from the bacteriological results of the last five days for which analyses have been completed. No sample shall exceed 230 total coliform organisms/100 mL in any confirmed sample.</p>
Posting	Signs must read "Warning: Recycled Water—Do Not Enter," or equivalent signage, new signs in both English and Spanish. Signs must be posted every 500 feet and at each corner of the outer perimeter of the irrigated site. Signs are required where management unit border areas are accessible to the public.
Fencing	Required, cyclone with barbed wire, or other measure approved by DEQ around lagoons and management units.
Construction plans	Pursuant to Idaho Code §39-118, IDAPA 58.01.16, and IDAPA 58.01.17, detailed plans and specifications must be submitted to DEQ for review and approval before construction, modification, or expansion of any wastewater treatment, storage, conveyance structures, ground water monitoring wells, or reuse facility. Inspection requirements must be satisfied, and within 30 days of completion of construction, the permittee must submit as-built plans or a letter from an Idaho professional engineer certifying the facilities or structures were constructed in substantial accordance with the approved plans and specifications.
Records retention requirements	Keep records generated to meet the requirements of this permit for the duration of the permit, including administrative extensions, plus two years.
Flow Meter Calibration	Calibrate flow meters FM-108-01 and FM-108-02 during the first year of the permit and at a frequency consistent with the manufacturer's specifications thereafter. Documentation of flow meter calibration must be submitted with the annual report.

## 5. Monitoring Requirements

### 5.1 Recycled Water Sampling and Analyses

#### 5.1.1 Constituent Monitoring

Monitoring Point Serial Number and Location	Sample Description	Sample Type and Frequency	Constituents (mg/L unless otherwise specified)
WW-108-01 Point of discharge to RIBs	Recycled water from LG-108-01 to all RIBs	Grab sample: Monthly	Total Kjeldahl nitrogen Nitrate+nitrite-nitrogen Ammonia nitrogen Total phosphorus pH (Standard Units) Chloride Total coliform organisms/100mL <sup>a</sup> Total residual chlorine <sup>a</sup>

- a. Weekly grab sample required if the permittee discharges Class C recycled water to the RIBs (IDAPA 58.01.17.601.03).

#### 5.1.2 Management Unit and Other Flow Monitoring

Management Unit or Flow Measurement Serial Number and Location	Sample Description	Sample Type and Frequency	Parameters, each MU or FM
FM-108-01 Ultrasonic flow level measurement and V-notch weir at LG-108-01 outlet	Recycled water flow from LG-108-01 to all RIBs	Daily meter reading Monthly compilation of data	Volume (MG/month) Volume (gallons/day) <sup>a</sup>
FM-108-02 Clamp on ultrasonic flow meter on influent line	Wastewater influent to LG-108-01	Daily meter reading Monthly compilation of data	Volume (MG/month)

- a. Record which RIB is in use.

## 5.2 Ground Water Monitoring

### 5.2.1 Ground Water Monitoring Point Descriptions

Monitoring Point Serial Number	Common Designation	Well Type	Gradient Location
GW-108-01	MW 1	Monitoring well	Upgradient
GW-108-02	MW 2	Monitoring well	Midgradient (between RIB 3 and 4)
GW-108-03	MW 3	Monitoring well	Downgradient of MU-108-01
GW-108-04	MW 4	Monitoring well	Midgradient (between RIB 3 and 4)
GW-108-05 <sup>a</sup>	MW 5	Monitoring well	Downgradient of LG-108-01
GW-108-06 <sup>a</sup>	MW 6	Monitoring well	Midgradient (next to LG-108-01)
GW-108-07 <sup>a</sup>	MW 7	Monitoring well	Downgradient of LG-108-01

- a. If wells are not constructed by August 23, 2022, the permittee shall seek DEQ reapproval within 30 days and propose a new completion date for well construction.

### 5.2.2 Ground Water Monitoring, Sampling, and Analyses

Monitoring Point Serial Number	Sampling Point Description	Sample Type and Frequency	Constituents (mg/L unless otherwise specified)
GW-108-01 GW-108-02 GW-108-03 GW-108-04 GW-108-05 <sup>b</sup> GW-108-06 <sup>b</sup> GW-108-07 <sup>b</sup>	Monitoring wells	Field measurements: quarterly (February, May, August, and November)	Water table elevation (feet) Water table depth (feet) Specific conductance/electrical conductivity (µmhos/cm) Temperature (°C) pH (Standard Units)
Unfiltered grab sample: quarterly (February, May, August, and November)		Total Kjeldahl nitrogen Nitrate+nitrite-nitrogen Total phosphorus Total dissolved solids Chloride <i>E. coli</i> (organisms/100 mL) <sup>a</sup>	

- a. *E. coli* analysis sensitivity for ground water samples must be capable of producing results of 1 organism/100 mL.
- b. The permittee shall commence monitoring of these wells after wells after construction.



### 5.3 Surface Water Monitoring

#### 5.3.1 Surface Water Monitoring Point Descriptions

Monitoring Point Serial Number	Location Description
SW-108-01	Upstream of RIBs and LG-108-01 in Mores Creek
SW-108-02	Downstream of RIBs and confluence of drainage bisecting reuse facility in Mores Creek
SW-108-03	Downstream of SW-108-01 and upstream of SW-108-03 in Mores Creek
SW-108-04	Downstream of SW-108-03 and upstream of SW-108-02 in Mores Creek

#### 5.3.2 Surface Water Monitoring, Sampling, and Analyses

Monitoring Point Serial Number	Sampling Point Description	Sample Type and Frequency <sup>a</sup>	Constituents (mg/L unless otherwise specified)
SW-108-01 SW-108-02 SW-108-03 SW-108-04	Surface water of Mores Creek	Field measurements: monthly <sup>b</sup>	pH (Standard Units) Temperature (°C) Dissolved oxygen Total chlorine residual
		Grab sample: monthly <sup>b</sup>	Total Kjeldahl nitrogen Nitrate+nitrite-nitrogen Ammonia nitrogen Total phosphorus Biochemical oxygen demand Chloride <i>E. coli</i> (organisms/100 mL) <sup>c</sup>

- Notify DEQ if snow or ice prohibits collection of surface water samples.
- Monthly for first two years of the permit and quarterly thereafter (February, May, August, and November) if constituent levels do not exceed thresholds determined in CA-108-04 and approved by DEQ.
- The permittee shall notify DEQ's Boise Regional Office immediately if any surface water sample analysis, either in the upstream or downstream locations shows coliform counts that exceed 406 *E. coli* organisms per 100mL (IDAPA 58.01.02.251.01.b.ii).

#### 5.4 Soil Monitoring – *Not Required*

#### 5.5 Crop Monitoring – *Not Required*

#### 5.6 Lagoon Information

Serial number	Description	Surface Area, acres	Maximum Operating Volume, MG	Liner Type
LG-108-01	Aerated lagoon	1.05	2.14	60 mil PVC

## 6. Reporting Requirements

### 6.1 Annual Report Requirements

The permittee must submit to DEQ an annual report prepared by a competent environmental professional covering the previous reporting year.

#### 6.1.1 Due Date

The annual report is due no later than **January 31** of each year, which must cover the previous reporting year.

#### 6.1.2 Required Contents

The annual report must include the following:

1. Detailed results of the required monitoring as described in section 5 of this permit. The report must present all monitoring data in summary tables to expedite review. If the permittee monitors any parameter for compliance purposes more frequently than required by this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the annual report.
2. A brief interpretive discussion of the results of all required monitoring data as specified by section 5. The discussion must address data quality objectives, validation, and verification; explain what the data say about permit compliance; and reuse facility environmental impacts. The reporting year for this permit is specified in section 4.5.
3. Status of all work described in section 3 of this permit.
4. Results of all backflow testing, repairs, and replacements required by section 9.1.1 of this permit.
5. Discussion of major maintenance activities such as major equipment replacement, lagoon liner maintenance, and wastewater treatment and reuse facility maintenance.
6. A summary of all noncompliance events that occurred during the reporting year. Examples of noncompliance events that must be discussed include, but are not limited to: exceedance of permit limits, complaints, missed monitoring events, incorrect monitoring dates or frequencies, dry monitoring wells, uncontained spills causing runoff, construction without DEQ engineering plan approval, construction without engineering inspection, and reporting incorrect acreage.
7. Laboratory analytical reports that show results, analytical methods, and practical quantitation limits for monitoring specified in section 5 of the permit. Chain of custody forms, supporting information for laboratory analytical reports, and quality assurance documentation shall be available for review upon request by DEQ.
8. The calculations and results for the parameters in the following table:

Monitoring Point Serial Number	Parameter (Calculate for each MU)	Units
MU-108-01 MU-108-02 MU-108-03 MU-108-04	Recycled water loading rate	MG/month
	Recycled water nitrogen and phosphorus loading rates	Pounds/year
	RIB distribution	Date(s) each RIB is active Total days per year RIB is active

### 6.1.3 Submittals

All applications, annual reports, or other information submitted to DEQ as required by this permit must be signed and certified as follows:

- Permit applications must be signed by the responsible official as described below:
  - For a corporation by a responsible corporate officer.
  - For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
  - For a municipality, state, federal, Indian tribe, or other public agency by either the principal executive officer, ranking elected official, or a person of decision-making authority who can legally bind the permittee with respect to the permit.
- Annual reports and other information required by this permit must be signed by the responsible official or by a duly authorized representative of that person. A person is a duly authorized representative only if all of the following are true:
  - The authorization is made in writing by the responsible official.
  - The authorization specifies either an individual or 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 having overall responsibility for environmental matters for the company.
  - The written authorization is submitted to DEQ.

Submit all applications, annual reports, and other information required by this permit to the following DEQ regional office at this address:

Engineering Manager  
 Idaho Department of Environmental Quality  
 Boise Regional Office  
 1445 North Orchard  
 Boise, Idaho 83706-2239

The annual report, or any other data or monitoring information submitted to DEQ, must include the following certification statement and be signed, dated, and certified by the permittee's Responsible Official or duly Authorized Representative:

*"I certify that the information provided in this submittal was prepared in conformance with the current Quality Assurance Project Plan and is to the best of my knowledge, true, accurate and complete and I acknowledge that knowing submission of false or incomplete information may result in permit revocation as provided for in IDAPA 58.01.17.920.01 or other enforcement action as provided for under Idaho law."*

Permit applications must include the following certification statement and be signed, dated, and certified by the permittee's Responsible Official:

*"I certify that the information provided in this submittal is, to the best of my knowledge, true, accurate and complete and I acknowledge that knowing submission of false or incomplete information may result in permit revocation as provided for in IDAPA 58.01.17.920.01, non-issuance of the permit, or other enforcement action as provided for under Idaho law."*

Other information submitted to DEQ as required by the permit must include the above certification statement and be signed, dated, and certified by the permittee's Responsible Official or duly Authorized Representative.

## **6.2 Emergency and Noncompliance Reporting**

The permittee must report noncompliance incidents to DEQ's regional office at (208) 373-0550 or toll-free at (888) 800-3480.

The permittee may also be required to report unauthorized discharges to surface waters to DEQ's IPDES program. The DEQ IPDES hotline is (833) IPDES24 or (833) 473-3724.

In case of public health emergencies, the permittee should call the 24-hour Idaho Emergency Medical Services Communications Center number at (800) 632-8000.

Section 8 of this permit and IDAPA 58.01.17.500.06 provide the reporting requirements for facilities.

The permittee must report all instances of permit non-compliance that may endanger public health or the environment and unauthorized discharges to surface waters of the State of Idaho to DEQ's regional office by telephone (phone numbers provided in this section) within 24 hours from the time the permittee becomes aware of these events at the phone numbers provided in this section.

The permittee must provide a written follow-up to the DEQ regional office within five days from the time the permittee became aware of the permit non-compliance or unauthorized discharge.

## 7. Reserved

## 8. Standard Permit Conditions

The following standard permit conditions are included as terms of this permit as required by the "Recycled Water Rules," (IDAPA 58.01.17.500).

### 500. STANDARD PERMIT CONDITIONS.

The following conditions shall apply to and be included in all permits. (4-1-88)

01. **Compliance Required.** The permittee shall comply with all conditions of the permit. (4-1-88)
02. **Renewal Responsibilities.** If the permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the permittee shall apply for a new permit in accordance with these rules. (4-1-88)
03. **Operation of Facilities.** The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, control and monitoring, which are installed or used by the permittee to achieve compliance with the permit or these rules. (4-1-88)
04. **Provide Information.** The permittee shall furnish to the Director within a reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these rules. (4-1-88)
05. **Entry and Access.** The permittee shall allow the Director, consistent with Title 39, Chapter 1, Idaho Code, to:  
a. Enter the permitted facility. (4-1-88)  
b. Inspect any records that must be kept under the conditions of the permit. (4-1-88)  
c. Inspect any facility, equipment, practice, or operation permitted or required by the permit. (4-1-88)  
d. Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility. (4-1-88)
06. **Reporting.** The permittee shall report to the Director under the circumstances and in the manner specified in this section: (4-1-88)
  - a. In writing at least thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process. When the alteration or addition results in a need for a major modification, such alteration or addition shall not be made prior to Department approval issued in accordance with these rules. (4-7-11)
  - b. In writing thirty (30) days before any anticipated change which would result in noncompliance with any permit condition or these rules. (4-1-88)
  - c. Orally within twenty-four (24) hours from the time the permittee became aware of any noncompliance which may endanger the public health or the environment at telephone numbers provided in the

permit by the Director. (4-1-88)

d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any noncompliance unless extended by the Department. This report shall contain: (4-1-88)

i. A description of the noncompliance and its cause; (4-1-88)

ii. The period of noncompliance including to the extent possible, times and dates and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and (4-7-11)

iii. Steps taken or planned, including timelines, to reduce or eliminate the continuance or reoccurrence of the noncompliance. (4-7-11)

e. In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report. (4-1-88)

**07. Minimize Impacts.** The permittee shall take all necessary actions to eliminate and correct any adverse impact on the public health or the environment resulting from permit noncompliance. (4-1-88)

**08. Compliance with "Ground Water Quality Rule."** Permits issued pursuant to these rules shall require compliance with IDAPA 58.01.11, "Ground Water Quality Rule." (4-7-11)

## **9. General Permit Conditions**

The following general permit conditions are based on the cited rules at the time of issuance and are enforceable as part of this permit. Note that the rules cited in this section, and elsewhere in this permit, are supplemented by the rules themselves. Rules applicable to your facility are enforceable whether or not they appear in this permit.

### **9.1 Operations**

#### **9.1.1 Backflow Prevention**

Reuse facilities with existing or planned cross-connections or interconnections between the recycled water system and any water supply (potable or nonpotable) or surface water, shall have backflow prevention assemblies, devices, or methods as required by applicable rule or as specified in this permit and approved by DEQ.

For public water systems, backflow assemblies shall meet the requirements of IDAPA 58.01.08.543. Assemblies shall be adequately maintained and shall be tested annually by a certified backflow assembly tester, and repaired or replaced as necessary to maintain operational status.

For domestic water supply wells, backflow prevention devices shall meet the requirements of IDAPA 07.02.04 and shall be adequately operated and maintained.

Irrigation water supply wells shall meet the requirements of IDAPA 37.03.09.36 for preventing any waste or contamination of the ground water resource. Backflow prevention assemblies or devices used to protect the ground water shall be adequately operated and maintained.

Discharge of recycled water to surface water is regulated by the DEQ. An IPDES permit is required for any discharge to surface water and backflow prevention shall be implemented to prevent any unauthorized discharge. Backflow prevention assemblies or devices used to protect surface water shall be adequately operated and maintained.

Records of all testable backflow assembly test results, repairs, and replacements shall be kept at the reuse facility along with other operational records, and shall be discussed in the annual report and made available for inspection by DEQ. Other approved means of backflow prevention, such as siphons and air-gap structures that cannot be tested, shall be maintained in operable order.

#### **9.1.2 Restricted to Premises**

Wastewaters or recharge waters applied to the land surface must be restricted to the premises of the application site. Wastewater discharges to surface water require an IPDES or NPDES permit (IDAPA 58.01.16.600.02).

### 9.1.3 Health Hazards, Nuisances, and Odors Prohibited

Health hazards, nuisances, and odors are prohibited as follows:

Wastewater must not create a public health hazard or nuisance condition (IDAPA 58.01.16.600.03).

No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution (IDAPA 58.01.01.776.01).

Air Pollution defined as the presence in the outdoor atmosphere of any air pollutant or combination thereof in such quantity of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property (IDAPA 58.01.01.006.06).

### 9.1.4 Solids Management

**Biosolids** are the nutrient-rich organic materials resulting from the treatment of sewage sludge. When treated and processed, sewage sludge becomes biosolids that can be safely recycled and applied as fertilizer to sustainably improve and maintain productive soils and stimulate plant growth.

Biosolids generated from sewage sludge are regulated by DEQ under 40 CFR Part 503 and require a DEQ-approved sludge disposal plan as outlined in IDAPA 58.01.16.650. Contact DEQ before to applying biosolids at any permitted reuse facility.

**Sludge** is the semi-liquid mass produced and removed by wastewater treatment processes. This does not include grit, garbage, and large solids.

Sludge may be generated by wastewater treatment processes at municipal and industrial facilities. A DEQ-approved sludge disposal plan, as outlined in IDAPA 58.01.16.650, may be required.

**Solid waste** is any garbage or refuse, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges that are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended.

Solid waste does not include inert wastes, manures and crop residues ultimately returned to the soils at agronomic rates, and any agricultural solid waste that is managed and regulated pursuant to rules adopted by the Idaho Department of Agriculture. DEQ reserves the right to use existing authorities to regulate agricultural waste that impacts human health or the environment.



Solid waste is regulated under the "Solid Waste Management Rules" (IDAPA 58.01.06). Wastes otherwise regulated by DEQ (i.e., this permit) are not regulated under IDAPA 58.01.06.

**Waste solids** include sludge and wastes otherwise regulated by DEQ according with IDAPA 58.01.06.001.03.a.xii. Waste solids may include vegetative waste, silt and mud containing organic matter, and other non-inert solid wastes.

Inert wastes are defined as non-combustible, nonhazardous, and non-putrescible solid wastes that are likely to retain their physical and chemical structure and have a de minimis potential to generate leachate under expected conditions of disposal, which includes resistance to biological attack.

Waste solids require a DEQ-approved sludge disposal plan as outlined in IDAPA 58.01.16.650.

### **9.1.5 Temporary Cessation of Operations and Closure (IDAPA 58.01.17.801)**

Temporary cessation of operations and closure must be addressed as follows:

**01. Temporary Cessation.** A permittee shall implement any applicable conditions specified in the permit for temporary cessation of operations. When the permit does not specify applicable temporary cessation conditions, the permittee shall notify the Director prior to a temporary cessation of operations at the facility greater than sixty (60) days in duration and any cessation not for regular maintenance or repair. Cessation of operations necessary for regular maintenance or repair of a duration of sixty (60) days or less are not required to notify the Department under this section. All notifications required under this section shall include a proposed temporary cessation plan that will ensure the cessation of operations will not pose a threat to human health or the environment. (4-7-11)

**02. Closure.** A closure plan shall be required when a facility is closed voluntarily and when a permit is revoked or expires. A permittee shall implement any applicable conditions specified in the permit for closure of the facility. Unless otherwise directed by the terms of the permit or by the Director, the permittee shall submit a closure plan to the Director for approval at least ninety (90) days prior to ceasing operations. The closure plan shall ensure that the closed facility will not pose a threat to human health and the environment. Closure plan approval may be conditioned upon a permittee's agreement to complete such site investigations, monitoring, and any necessary remediation activities that may be required. (4-7-11)

### **9.1.6 Plan of Operation (IDAPA 58.01.17.300.05)**

The PO must comply with the following:

**05. Reuse Facility Operation and Maintenance Manual or Plan of Operations.** A facility's operation and maintenance manual must contain all system components relating to the reuse facility in order to comply with IDAPA 58.01.16 "Wastewater Rules," Section 425. Manuals and manual amendments are subject to the review and approval provision therein. In addition to the content required by IDAPA 58.01.16.425, manuals for reuse facilities shall include, if applicable: operation and management responsibility, permits and standards, general plant description, operation and control of unit operations, land application site maps, wastewater characterization, cropping plan, hydraulic loading rate, constituent loading rates, compliance activities, seepage rate testing, site management plans, monitoring, site operations and maintenance, solids handling and processing, laboratory testing, general maintenance, records and reports, store room and inventory, personnel, an emergency operating plan, and any other information required by the Department. (4-7-11)

### **9.1.7 Seepage Testing Requirements (IDAPA 58.01.16.493.02.c)**

**Subsequent Tests.** All lagoons covered under these rules must be seepage tested by an Idaho licensed professional engineer, an Idaho licensed professional geologist, or by individuals under their supervision every ten (10) years after the initial testing. (5-8-09)

### **9.1.8 Ground Water Quality Rule (IDAPA 58.01.11)**

The permittee shall comply with the requirements of the "Ground Water Quality Rule" (IDAPA 58.01.11).

## **9.2 Administrative**

Requirements for administration of the permit are defined as follows.

### **9.2.1 Permit Modification (IDAPA 58.01.17.700)**

**01. Modification of Permits.** A permit modification may be initiated by the receipt of a request for modification from the permittee, or may be initiated by the Department if one (1) or more of the following causes for modification exist: (4-7-11)

**a. Alterations.** There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. (4-7-11)

**b. New standards or regulations.** The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. (4-7-11)

**c. Compliance schedules.** The Department determines good cause exists for modification of a compliance schedule or terms and conditions of a permit. (4-7-11)

**d. Non-limited pollutants.** When the level of discharge of any pollutant which is not limited in the permit exceeds the level which may cause an adverse impact to surface or ground waters. (4-7-11)

**e. To correct technical mistakes,** such as errors in calculation, or mistaken interpretations of law made in determining permit conditions. (4-7-11)

**f. When a treatment technology proposed,** installed, and properly operated and maintained by the permittee fails to achieve the requirements of the permit. (4-7-11)

### **9.2.2 Permit Transferable (IDAPA 58.01.17.800)**

**01. General.** A permit may be transferred only upon approval of the Department. No transfer is required for a corporate name change as long as the secretary of state can verify that a change in name alone has occurred. An attempted transfer is not effective for any purpose until approved in writing by the Department. (4-7-11)

### 9.2.3 Permit Revocation (IDAPA 58.01.17.920)

**01. Conditions for Revocation.** The Director may revoke a permit if the permittee violates any permit condition or these rules, or the Director becomes aware of any omission or misrepresentation of condition or information relied upon when issuing the permit. (4-7-11)

**02. Notice of Revocation.** Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within thirty-five (35) days of receipt of the notice by the permittee, unless within that time the permittee requests an administrative hearing in writing. The hearing shall be conducted in accordance with IDAPA 58.01.23, Rules of Administrative Procedure before the Board of Environmental Quality." (5-3-03)

**03. Emergency Action.** If the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, the Director shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality." (3-15-02)

**04. Revocation and Closure.** A permittee shall perform the closure requirements in a permit, the closure requirements of these rules, and complete all closure plan activities notwithstanding the revocation of the permit. (4-7-11)

### 9.2.4 Violations (IDAPA 58.01.17.930)

Any person violating any provision of these rules or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars (\$10,000) or one thousand dollars (\$1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor. (4-1-88)

### 9.2.5 Severability

The provisions of this permit are severable, and if a provision or its application is declared invalid or unenforceable for any reason, that declaration will not affect the validity or enforceability of the remaining provisions.

## **10. Other Applicable Laws**

DEQ may refer enforcement of the following provisions to the state agency authorized to enforce that rule. The permittee shall comply with all applicable provisions identified in this section. Compliance with this permit does not relieve the permittee from applicable requirements in other federal, state, and local laws, statutes, and rules.

### **10.1 Owner Responsibilities for Well Use and Maintenance**

#### **10.1.1 Well Use**

The well owner must not operate any well in a manner that causes waste or contamination of the ground water resource. Failure to operate, maintain, knowingly allow the construction of any well in a manner that violates these rules, or failure to repair or properly decommission (abandon) any well as herein required will subject the well owner to civil penalties as provided by statute. See IDAPA 37.03.09.036.01 and consult the Idaho Department of Water Resources (IDWR) for more information.

#### **10.1.2 Well Maintenance**

The well owner must maintain the well to prevent waste or contamination of ground waters through leaky casings, pipes, fittings, valves, pumps, seals, or through leakage around the outside of the casings, whether the leakage is above or below the land surface. Any person owning or controlling a noncompliant well must have the well repaired by a licensed well driller under a permit issued by the IDWR director according to the applicable rules. See IDAPA 37.03.09.036.02 and consult IDWR for more information.

#### **10.1.3 Wells Posing a Threat to Human Health and Safety or Causing Contamination of the Ground Water Resource**

The well owner must have any well shown to pose a threat to human health and safety or cause contamination of the ground water resource immediately repaired or decommissioned (abandoned) by a licensed well driller under a permit issued by the IDWR director according to the applicable rules. See IDAPA 37.03.09.036.06 and consult IDWR for more information.

## 11. Site Maps

### 11.1 Regional Map





# Appendix B

---

## Daily Log and the Irrigation System Data Management Spreadsheet





# Appendix C

---

## Chain of Custody Record

CLIENT CODE=

# CHAIN OF CUSTODY RECORD

## CLIENT INFORMATION:

**Project Manager:**

**Company:**

**Address:**

**Phone:**

**Fax:**

**Sampled by: (Please print)**

**Transported by: (Please print)**

**Lab ID**

**Date Sampled**

**Time Sampled**

**Sample Description (Source)**

**Sample Matrix**

**Remarks:**

## PROJECT INFORMATION:

**Project Name:**

**PWS Number:**

**Purchase Order Number:**

**Required Due Date:**

**E-mail Address:**

**ANALYTICAL LABS, INC.**

1804 N. 33rd Street • Boise, ID 83703

(208) 342-5515 • Fax: (208) 342-5591 • 1-800-574-5773

Website: [www.analyticallaboratories.com](http://www.analyticallaboratories.com)

E-mail: [ali@analyticallaboratories.com](mailto:ali@analyticallaboratories.com)

**TESTS REQUESTED**

**Invoice to: (If different than above address)**

**Special Instructions:**

ALLOCATIONS OF RISK: Analytical Laboratories, Inc. will perform preparation and testing services, obtain findings and prepare reports in accordance with Good Laboratory Practices (GLP). If, for any reason, Analytical Laboratories, Inc. errors in the conduct of a test or procedure, their liability shall be limited to the cost of the test or procedure completed in error. Under no circumstances will Analytical Laboratories, Inc. be liable for any other cost associated with obtaining a sample or use of data.

**Note: Samples are discarded 21 days after results are reported. Hazardous samples will be returned to client or disposed of at client expense.**

**Relinquished By: (Signature)**

**Print Name:**

**Company:**

**Time:**

**Received By: (Signature)**

**Print Name:**

**Company:**

**Time:**

**Relinquished By: (Signature)**

**Print Name:**

**Company:**

**Time:**

**Received By: (Signature)**

**Print Name:**

**Company:**

**Time:**

**SAMPLE RECEIPT Total # of Containers:**

**Chains of Custody Seals Y / N / NA Intact: Y / N / NA Temperature Received:**

**Condition:**

the 1990s, the number of people with a disability in the United States has increased by 25% (U.S. Census Bureau 1997).

As a result of the increase in the number of people with disabilities, the need for accessible information has become more acute. The National Center for Accessible Information (NCAI) has estimated that 10% of the population has a disability that may affect their ability to access information (NCAI 1997).

The NCAI has also identified several barriers to accessible information. These barriers include: (1) physical barriers, such as inaccessible buildings and equipment; (2) communication barriers, such as inaccessible formats and languages; and (3) attitudinal barriers, such as discrimination and prejudice (NCAI 1997).

The NCAI has developed a number of strategies to address these barriers. These strategies include: (1) physical accessibility, such as providing accessible buildings and equipment; (2) communication accessibility, such as providing accessible formats and languages; and (3) attitudinal accessibility, such as providing training and education (NCAI 1997).

The NCAI has also developed a number of resources to help people with disabilities access information. These resources include: (1) the National Center for Accessible Information (NCAI) website; (2) the National Center for Accessible Information (NCAI) directory; and (3) the National Center for Accessible Information (NCAI) newsletter (NCAI 1997).

The NCAI has also developed a number of programs to help people with disabilities access information. These programs include: (1) the National Center for Accessible Information (NCAI) training program; (2) the National Center for Accessible Information (NCAI) technical assistance program; and (3) the National Center for Accessible Information (NCAI) grant program (NCAI 1997).

The NCAI has also developed a number of publications to help people with disabilities access information. These publications include: (1) the National Center for Accessible Information (NCAI) directory; (2) the National Center for Accessible Information (NCAI) newsletter; and (3) the National Center for Accessible Information (NCAI) report (NCAI 1997).

The NCAI has also developed a number of services to help people with disabilities access information. These services include: (1) the National Center for Accessible Information (NCAI) website; (2) the National Center for Accessible Information (NCAI) directory; and (3) the National Center for Accessible Information (NCAI) newsletter (NCAI 1997).

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The NCAI has also developed a number of resources to help people with disabilities access information. These resources include: (1) the National Center for Accessible Information (NCAI) website; (2) the National Center for Accessible Information (NCAI) directory; and (3) the National Center for Accessible Information (NCAI) newsletter (NCAI 1997).

**Water Reuse Permit M-108-04  
Quality Assurance Project Plan (QAPP)  
for Required Environmental and Process  
Monitoring  
City of Idaho City**

**Revision Number: 1**

***Date: July, 2023***

**Prepared by**

Mountain Waterworks, Inc.

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**APPROVALS**

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\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Responsible Charge  
Operator

Paul Sifford

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Responsible Official

Kenny Everhart

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

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## Section 1 **PROJECT MANAGEMENT**

### 1.1 Distribution List

Names and addresses of those receiving copies of this QAPP are provided in **Table 1-1**.

**Table 1-1. Distribution List for This QAPP**

Title	Name and Address
Public Works Director	
Responsible Charge Operator	
Contract Laboratory #1	Analytical Laboratories, Inc. 1804 North 33 <sup>rd</sup> Street Boise, ID 83703
DEQ Regional Engineering Manager	Valerie Greear 1445 N Orchard Boise, ID 83706
Responsible Official	

## 1.2 Project/Task Organization

Table 1-2 lists key project personnel and their corresponding responsibilities.

**Table 1-2. Project Personnel, Titles, and Responsibilities**

Name and Title/Responsibility	Contact Information	Responsibility
<b>Kenny Everhart</b> Environmental/Project Manager	PO Box 130 Idaho City, ID 83631 (208) 392-4584	Responsible for all environmental monitoring, regulatory, planning and development activities at the plant.
<b>Paul Sifford</b> Monitoring Supervisor	6395 W Gowen Rd, Boise, ID 8370 (208) 343-7001	Responsible for all environmental monitoring and sampling, including both regulatory and internal process monitoring at the plant. Does final review and sign-off on annual report. Reports to <b>Kenny Everhart</b> .
<b>Tami Claus</b> Quality Assurance/Quality Control (QA/QC) Officer	PO Box 130 Idaho City, ID 83631 (208) 984-0724	Responsible for implementing the facility QAPP, QA/QC elements of environmental monitoring and sampling, including both regulatory and internal process monitoring at the plant. Reports to <b>Kenny Everhart</b> .
Sampling and Monitoring Staff	PO Box 130 Idaho City, ID 83631 (208) 984-0724	Responsible for conducting all environmental monitoring and sampling, including both regulatory and internal process monitoring at the plant. Creates and maintains monitoring documentation and compiles documentation for preparation of the annual report. Does calculations required in the annual report and enters data. Reports to <b>Kenny Everhart</b> .
<b>Tami Claus</b> Facility Laboratory Manager	PO Box 130 Idaho City, ID 83631 (208) 984-0724	Responsible for conducting chemical and physical analyses of environmental samples done in-house. Responsible for maintaining and calibrating equipment, and for implementing all laboratory QA/QC requirements. Reports to <b>Kenny Everhart</b> .
<b>Analytical Laboratories, Inc.</b> Contract Laboratory #1	1804 North 33rd Street Boise, ID 83703 (208) 342-5515	Responsible for conducting chemical and physical analyses of environmental samples done through this contract laboratory. Responsible for maintaining and calibrating equipment, and for implementing all laboratory QA/QC requirements. Works with <b>Tami Claus</b> and <b>Paul Sifford</b> . Reports results to <b>Tami Claus</b> .

## 1.3 Purpose and Intended Use of Data

### 1.3.1 Purpose

The purpose of this quality assurance project plan (QAPP) is to describe the technical requirements and quality assurance activities of the environmental data collection/analyses operations to be performed under Water Reuse Permit M-108-04 (hereafter 'permit'). It describes the scope of monitoring, the organization and persons involved, the data quality objectives, the monitoring procedures, and the specific quality control (QC) measures to be employed. All QAPP activities are implemented to determine whether the results of the sampling and monitoring

performed are the right type, quantity, and quality to satisfy the requirements of the permit (**Section 5**). This QAPP will be updated as necessary to reflect significant changes.

### 1.3.2 Intended Use of Data

The data collected as required in the permit (**Section 5**), are used to compare to threshold criteria in either the permit or applicable regulations to determine compliance. Data are also collected to perform required calculations as specified in the permit (**Section 6**), such as loading rate calculations. Data and derivative calculations are used both by DEQ and the permittee to determine whether the facility is in compliance with applicable rules and regulations pertaining to environmental quality, public health, and safety. These data are also used by the facility for management purposes. Submittal of required monitoring data and calculations is specified in the permit (**Section 6**). The QA data are used to determine whether the quality of the data is adequate for the intended regulatory purpose.

## 1.4 Environmental / Process Monitoring and Sample Analyses Description

### 1.4.1 General Overview

The permit (**Section 5**) requires specific media to be monitored and identifies requisite frequencies and quality assurance/quality control (QA/QC) needs. These requirements are summarized in **Table 1-3**. Specific parameters, equipment, and procedures are provided in **Section 5** for the different media being monitored. Duplicate sampling is discussed further in **Section 1.5.1.1**.

**Table 1-3. Permit M-174-05 Required Media to be Monitored and QA/QC Activities**

Monitored Media	Frequency	QA/QC Needs	See the Following QAPP Reference
Recycled and Surface Water Chemistry	Variant <sup>1</sup>	5 % Duplicate Samples Required	Section 5.1
Recycled Water Flow	Record Daily; Compile Monthly and Annually; Each HMU <sup>2</sup>	Not Required	Section 5.1
Flow Meter Calibration	Annually	Not Required	Section 5.1
Ground Water Chemistry (monitoring wells)	Quarterly; February, May, August, and November	5 % Duplicate Samples Required	Section 5.2

**Notes:**

1. Sampling frequency is monthly for Class D recycled water and Weekly for select constituents for Class C recycled water. Each sampling frequency is identified in section 5.1.
2. HMU – hydraulic management unit

### 1.4.2 Monitoring and Reporting Timetable

Monitoring, sampling, and analyses are required at prescribed frequencies according to the parameter and media. All monitoring, sampling, and analyses are required by the permit (Section 5) to be completed, compiled, and submitted to DEQ annually in the form of an annual report. See further discussion of annual reporting in Section 3.2. The required timetable is shown in Table 1-4.

**Table 1-4. Monitoring and Reporting Timetable**

Activity	Date
Beginning of Reporting Year	January 1
End of Reporting Year	December 31 of the calendar year following the beginning of the reporting year
Annual Report Submittal Date	January 31 of the calendar year following the end of the reporting year

## 1.5 Data Quality Objectives (DQOs)

This section presents several data quality objectives (DQOs) that constitute criteria to determine whether data meets acceptable standards of quality. Also discussed are the associated data quality indicators and how these are employed to analyze data in order to determine whether DQOs are achieved. DQOs discussed include those for the quantitative indicators of precision and accuracy, data representativeness, and data comparability.

### 1.5.1 Quantitative Data Quality Indicators

This section discusses data quality objectives associated with the quantitative indicators of precision and accuracy. Discussed here are action levels, and actions necessary for assessing data quality for the monitored media identified in Table 1-3. Parameters (i.e. either constituents to be analyzed or other measurements to be taken) having direct regulatory implications for compliance are required to meet numerical data quality objectives. These parameters include ground water constituents that have health-based and aesthetic standards (IDAPA 58.01.11.200.01a and 01b, respectively), and recycled water constituents that are needed to calculate actual constituent loading rates, that are in turn compared with permitted rates.

#### 1.5.1.1 Precision

The relative percent difference (RPD), measures the difference between a sample result and the result of a corresponding duplicate, divided by the mean of the two results. The RPD is used in this QAPP as an indicator of precision. The RPD is calculated as shown in Equation 1.

$$RPD (\%) = \frac{[Sample (mg/L) - Duplicate (mg/L)]}{\left[ \frac{(Sample (mg/L) + Duplicate (mg/L))}{2} \right]} * 100$$

**Equation 1: Determining RPD (%)**

As noted in **Table 1-5** (see footnote), RPD criteria are waived in cases when the analytical result is  $\pm 1$  MDL (minimum detection level). This is because RPDs typically increase dramatically as the result approaches the MDL.

For data that do not meet RPD data quality objectives, the QA/QC Officer initiates an inquiry as to the cause of substandard data and makes recommendations for mitigating the cause(s).

Duplicate samples are taken by monitoring staff for media and analytes specified in **Table 1-3**. Duplicate sampling is done at a rate of five percent (5%) of samples submitted for analysis. The number of duplicate samples necessary therefore equates to the total number of samples required for the specific media during the reporting year times 0.05. If the resultant number is less than one (1), then a minimum of one (1) duplicate sample must be taken for that medium. If the number has a decimal fraction, the number of duplicates needed is rounded to the next-higher integer (e.g., a value of 1.4 is rounded up to 2).

For example, if 12 recycled water chemistry samples are required, 5% of 12 would be 0.6. The value 0.6 is less than 1, so the number of duplicate samples needed is 1. For another example, 7 monitoring wells are sampled quarterly, resulting in 28 samples. Five percent of 28 is 1.4. This value would be rounded up to 2 for the number of duplicates required. Analytes for which duplicates are required are listed in **Table 1-5**. Duplicates are submitted blind – i.e., they are given identification information known only to the facility and not to the laboratory conducting the analyses.

**Table 1-5. Data Quality Indicators<sup>1</sup>**

Parameter	Data Quality Indicator	Action Levels
Ground Water- nitrate (as N)	Relative Percent Difference (RPD)	$\pm 20\%$
Ground Water - total dissolved solids (TDS)	Relative Percent Difference (RPD)	$\pm 20\%$
Ground Water - total phosphorous	Relative Percent Difference (RPD)	$\pm 20\%$
Ground Water - fecal coliform	Relative Percent Difference (RPD)	$\pm 20\%$
Recycled water - total coliform	Relative Percent Difference (RPD)	$\pm 20\%$
Recycled water - total Kjeldahl nitrogen (TKN)	Relative Percent Difference (RPD)	$\pm 20\%$
Recycled water - nitrate and nitrite (both as N)	Relative Percent Difference (RPD)	$\pm 20\%$
Recycled water- ammonia (as N)	Relative Percent Difference (RPD)	$\pm 20\%$
Recycled water - total phosphorous	Relative Percent Difference (RPD)	$\pm 20\%$
Recycled water - total chlorine residual	Relative Percent Difference (RPD)	$\pm 20\%$
Surface Water - ammonia (as N)	Relative Percent Difference (RPD)	$\pm 20\%$
Surface Water- total phosphorus	Relative Percent Difference (RPD)	$\pm 20\%$
Surface Water - E.Coli	Relative Percent Difference (RPD)	$\pm 20\%$

Note:

1) The RPD criteria are waived when analytical results are within  $\pm 1$  MDL (minimum detection limit).

### 1.5.1.2 Accuracy

Accuracy is the agreement between the measured value of something and the accepted “true” value for the same thing. Accuracy is estimated based on measurements of samples of known composition and comparing measurements to those known values. The difference between the known values and measured values determines the degree of accuracy. For laboratory

procedures, accuracy is estimated based on analysis of calibration check standards, laboratory fortified blanks, surrogates, internal standards, and/or matrix spikes.

Both contract and in-house facility laboratories have their respective laboratory QC checks, as specified in the analytical method used for the specific media, to validate their results. These procedures are done at frequencies recommended by the analytical method and instrumentation operating manuals.

If results from any QC check for either in-house or contract laboratory are not within the range established in the analytical method accuracy goal, the laboratory will make a thorough review of laboratory procedures to identify and correct the problem. The laboratory will make a case-by-case determination regarding data usability and the need to qualify data.

### **1.5.2 Data Representativeness**

Data representativeness is determined by evaluating by assessing the accuracy and precision of the sampling program and expressing the degree to which samples represent actual site conditions. The representativeness criterion is satisfied in this QAPP by the following:

1. Choosing sampling locations that represent the media being monitored. For recycled water, see **Table 5-1**; for ground water, see **Table 5-4**.
2. Ensuring that sample collection procedures and protocols specified in **Section 5** are consistently followed during performance of sampling events.
3. Collecting a sufficient number of samples to describe constituent concentration variability within the confidence interval selected. For recycled water, see **Table 5-1**; for ground water, see **Table 5-5**.
4. Achieving complete data sets. Data completeness in this QAPP is established as the number of required parameters that were monitored at the times, places, and media required in the permit, divided by the total number of required monitored parameters. The data quality goal for this QAPP is 100%. This goal is consistent with the permit which mandates that all required monitoring be done.

### **1.5.3 Data Comparability**

Comparability is a qualitative measure of the confidence with which one data set can be compared to another. Throughout the term of this permit, the following shall be adhered to:

- 1) The analytical procedures used for a given media and parameters will be as defined in **0**.
- 2) The same laboratory will be used, if possible, to analyze all samples in an effort to ensure data comparability. If circumstances necessitate changing laboratories, the new laboratory will be selected conditional upon its ability to implement analytical and QA/QC elements of this QAPP as specified herein.



## 1.6 Training Requirements and Certification

Training requirements for different staff positions are shown in **Table 1-6**. The location where documentation of necessary training for staff must be kept is found in **Table 1-7**.

**Table 1-6. Project Staff and Training Requirements**

Position Title / Responsibility	Training and Training Requirements
Environmental / Project Manager	Trained by education and on-the-job in the design and implementation of environmental monitoring programs, quality control and quality assurance, project management, and environmental regulatory requirements and permit requirements.
Monitoring Supervisor	Trained in-house by previously trained staff on all monitoring and sampling protocols, use and calibration of sampling equipment, and environmental regulatory requirements and permit requirements.
Quality Assurance/ Quality Control (QA/QC) Officer	Trained by education and on-the-job in the design and implementation of environmental monitoring programs, quality control and quality assurance, and environmental regulatory requirements and permit requirements.
Sampling and Monitoring Staff	Trained in-house by previously trained staff on all monitoring and sampling protocols, use and calibration of sampling equipment, and regulatory and permit requirements.
Facility Laboratory Manager	Trained by education, through vendors, and on-the-job in standard operating procedures for required chemical analyses, instrument operation and calibration, quality control and quality assurance.
Contract Laboratories	Contract laboratories used (list name(s) here) are certified drinking water laboratories and are participants in National Proficiency Testing programs appropriate for types of analyses conducted by the laboratories. The soil testing laboratory used for permit required soil analyses participates in the North American Proficiency Testing Program (NAPT) program for soil, plant tissue, and water analyses.

## 1.7 Documentation and Records

Documentation for all permit-required monitoring, sampling, and analyses conducted according to this QAPP is summarized in **Table 1-7**. The generated documentation consists of field notebooks and field data sheets, chain of custody records, laboratory analyses reports, vendor certifications, an annual report summarizing the sampling events and results, and this QAPP (which includes sampling procedures in 0). This documentation is available to, and reviewed by, the QA/QC officer for quality control.

**Table 1-7. Required Monitoring and Sample Analyses for Permit M-108-04**

Monitoring and/or Sample Analyses / Other	Documentation	Disposition of Documentation
Recycled Water Chemistry	Chain of custody record (COC) for each sampling event. Laboratory analyses results sheets (lab sheets) from laboratory. Sampling field sheets.	One copy to Recycled water Records file in Operations Office.
Recycled Water Flow	Flow totalizer records; daily flow from filters to chlorine contact tank (FM-17403). The data is dumped once a month to spreadsheet files on a laptop computer.	Monthly Excel file data copies to Operations Office computer. Annual compilation of monthly files.
Irrigation Water Chemistry	<del>Chain of custody record (COC) for each sampling event. Laboratory analyses results sheets (lab sheets) from laboratory.</del>	<del>One copy to Recycled water Records file in Operations Office.</del>
Irrigation Water Flow	<del>Flow totalizer records; daily from supplemental irrigation line to irrigation (FM 17404). Run time log book for each month and data is dumped once a month to spreadsheet files on a laptop computer.</del>	<del>Monthly Excel file data copies to Operations Office computer. Annual compilation of monthly files.</del>
Flow Meter Calibration	Vendor or engineering calibration certification document for magnetic meter. Vendor or engineering pump test (volume/time) certification document.	Certification documents: One copy to Recycled water Records file in Operations Office.
Backflow Testing	Report of testing date(s) and results of the test (pass or fail). For failed tests, report the date of repair or replacement of backflow prevention device, and if the repaired/replaced device is operating correctly.	Report: One copy to Recycled water Records file in Operations Office.
Ground Water Chemistry (monitoring wells)	Chain of custody record (COC) for each sampling event. Laboratory analyses results sheets (lab sheets) from laboratory. Sampling field sheets.	One copy to Recycled water Records file in Operations Office.
Ground Water Chemistry (domestic wells)	<del>Chain of custody record (COC) for each sampling event. Laboratory analyses results sheets (lab sheets) from laboratory. Sampling field sheets.</del>	<del>One copy to Recycled water Records file in Operations Office.</del>
Soil Chemistry	<del>Chain of custody record (COC) for each sampling event. Laboratory analyses results sheets (lab sheets) from laboratory. Sampling field sheets.</del>	<del>One copy to Recycled water Records file in Operations Office.</del>
Plant Tissue Analyses	<del>Chain of custody record (COC) for each sampling event. Laboratory analyses results sheets (lab sheets) from laboratory. Sampling field sheets.</del>	<del>One copy to Recycled water Records file in Operations Office.</del>
Crop Yield	Contract farmer crop yield sheets. Each harvest and each HMU.	One copy to Recycled water Records file in Operations Office.
Project Manager Data Evaluation	Project Manager Data Evaluation Reports	One copy to Recycled water Records file in Operations Office.
Field Equipment Calibration, Inspection, and Maintenance	Initialed log books to record person and date of field equipment calibration, inspection, and maintenance.	Kept in Operations Office Shop area.

<b>Monitoring and/or Sample Analyses / Other</b>	<b>Documentation</b>	<b>Disposition of Documentation</b>
Staff Training	Documentation of necessary training	One copy to Recycled water Records file in Operations Office.
Other	Field and unit process log books	On location in the field or at the unit process (e.g. clarifier, pump house, etc.).

## Section 2 DATA GENERATION AND ACQUISITION

### 2.1 Sampling Locations

Sampling locations are listed in **Table 5-1** for recycled water and surface water; **Table 5-4** for ground water. Locations have been chosen in coordination with DEQ to reflect practical and logical points for monitoring and sampling for the recycled water treatment process. For selected environmental media, accessibility and likelihood of yielding representative samples were also considerations when choosing locations.

### 2.2 Sampling Methods

Sample collection procedures and parameter requirements are listed as follows: **Table 5-1 (Section 5.1.4)** for recycled water and **Table 5-5 (Section 5.2.5)** for ground water and surface water.

### 2.3 Sample Handling and Custody Procedures

Samples are collected by monitoring staff under the supervision of the Sampling and Monitoring Supervisor. Samples are properly labeled, preserved, and packed as specified in **0**.

A field sample sheet (**Appendix A**) is used to document information pertaining to each sampling event for each media monitored. The packing of samples prior to shipment to the laboratory, by courier or by personal transport, is described in **0**.

1. Transport time is minimized to ensure that samples reach the laboratory without exceeding holding times and to reduce the chances of being exposed to temperature variations. Samples are transported by vehicle to contract laboratories on the same day as the sampling event.
2. Sample delivery is coordinated in advance with the laboratory, and samples are delivered to the laboratory at the times they specify on the scheduled days. All instructions provided by the laboratory are followed. When the in-house facility laboratory is used, samples are received by the facility Laboratory Manager or designee.

All sample containers, labels, and preservatives are obtained through the contract laboratory or facility laboratory as applicable for the analyses being conducted. Samples must be preserved and must not exceed holding times noted in **0**.

For each sample taken, a chain of custody (COC) form (**Appendix B**) is completed when the sample is collected and will include all information requested on the form. The COC form:

- accompanies the sample from the time it is collected throughout the duration of the shipping process.
- is checked for a signature at the receiving laboratory.

## **2.4 Analytical Methods Requirements**

Analytical method requirements are listed as follows: **Table 5-2** and

**Table 5-3** for wastewater and irrigation water; **Table 5-6** for ground water.

## 2.5 Instrument/Equipment Testing, Inspection, and Maintenance Requirements

Requirements for instrument and equipment testing, inspection, and maintenance are listed in **Table 2-1**.

**Table 2-1. Instrument/Equipment Testing, Inspection, and Maintenance Requirements**

Equipment Type	Inspection Frequency	Type of Inspection
Composite Sampler for Recycled water Sampling	Before each use	Visual inspection to check for leaks and cracks, and to determine whether equipment was decontaminated after the previous use.
Field Parameter Meter for Ground Water Sampling	Before each use	Visual inspection to determine whether equipment was decontaminated after the previous use. Check for adequate charge on batteries.

## 2.6 Instrument Calibration and Frequency

Requirements for instrument calibration, including calibration frequencies, are listed in **Table 2-2**.

**Table 2-2. Instrument Calibration and Frequency**

Equipment Type	Calibration Frequency	Standard or Calibration Instrument Used
Laboratory Analytical Equipment	Determined by Laboratory Personnel	Determined by Laboratory Personnel
Composite Sampler for Recycled water Sampling	Determined by Manufacturer – See Manual	Determined by Manufacturer – See Manual
Field Parameter Meter for Ground Water Sampling	Determined by Manufacturer – See Manual	Determined by Manufacturer – See Manual

## 2.7 Inspection/Acceptance Requirements for Supplies and Consumables

The equipment and supplies required for this QAPP are listed in **0**. All sample containers are obtained through the facility or contract laboratory. Necessary reagents and calibration standards of appropriate grade and unexpired shelf-life are used.

## **2.8 Data Acquisition Requirements**

Pre-existing data related to this facility has been collected over the past 11 years. Both hard copies and electronic copies are stored in the operations office. Electronic copies are also kept at the corporate office. These data serve generally to compare with recently collected data, in order to determine trends, confirm general acceptable ranges of data, and corroborate possible instances of outliers and otherwise spurious data. See further discussion on data evaluation in 0.

## **2.9 Data Management**

The Monitoring Supervisor enters data into standardized DEQ spreadsheets. Data is stored on computer systems in both the operations and corporate offices. The Monitoring Supervisor makes a quarterly backup of all data, and the backups are stored in his/her office.

## Section 3 **ASSESSMENT AND OVERSIGHT**

### **3.1 Assessment and Response Actions**

The QA/QC Officer assesses the effectiveness of QAPP implementation by reviewing all associated documentation (see **Table 1-7**). Any errors or inconsistencies identified in the documentation are addressed and corrected to ensure the integrity of this plan. For more about validation and use of the data, see **Section 4**.

### **3.2 Reports**

Once the sampling has been completed and all sample results have been received, the Monitoring Supervisor prepares a final report (annual report) summarizing the sampling results according to the permit (**Section 6**), then requests review by the QA/QC Officer and the Environmental Project Manager. The Monitoring Supervisor then finalizes the report and submits it to DEQ.



## Section 4 DATA VALIDATION AND USABILITY

### 4.1 Data Review, Verification, and Validation

The data is validated for quality by the QA/QC officer, who performs the tasks listed in **Table 4-1**, at least quarterly and again during preparation of the annual report.

**Table 4-1. Data Review, Verification, and Validation Tasks**

Program Activity	Review Tasks
Sampling Protocol	<ol style="list-style-type: none"> <li>1. Verify whether sampling strategy conforms to the reuse permit and QAPP.</li> <li>2. Verify whether selection of sampling locations matches the reuse permit.</li> </ol>
Field Sampling	<ol style="list-style-type: none"> <li>1. Verify whether prescribed procedures and equipment were used.</li> <li>2. Verify whether proper containers and preservatives (including proper pH adjustment) were used.</li> <li>3. Verify whether all samples were properly stored and at appropriate temperatures.</li> </ol>
Field Documentation	<ol style="list-style-type: none"> <li>1. Verify whether proper data entry procedures were used for any field data sheets or notebooks.</li> <li>2. Chain-of-Custody forms: Verify whether forms are properly completed, signed, and dated during transfer. Verify whether all samples were assigned identification numbers and accounted for.</li> <li>3. Verify whether all samples were properly packaged.</li> </ol>
Field Analytical Testing Data	<ol style="list-style-type: none"> <li>1. Verify whether field instruments were properly calibrated.</li> <li>2. Verify calculations, transcriptions, and reporting units for field measurements recorded on any data sheets or notebooks.</li> </ol>
Laboratory	<ol style="list-style-type: none"> <li>1. Verify whether all requested data is reported and is in compliance with contract analytical specifications and methods.</li> <li>2. Verify whether COC documentation from laboratory is correct.</li> <li>3. Verify whether sample temperatures were &lt;10° C upon receipt at laboratory and refrigerated.</li> <li>4. Verify whether holding times were not exceeded from time of collection to time of analysis.</li> <li>5. Verify whether QC samples (e.g., duplicate samples) were analyzed.</li> </ol>
Record Storage	Verify whether the operations office files contain all field and laboratory data, and other records, pertinent to this QAPP.

### 4.2 Data Validation and Verification Methods

The QA/QC Officer reviews all data for completeness, errors and inconsistencies, which includes conducting a statistical analysis of the data as described in **Section 1.5.1**, calculating relative percent differences (RPDs) of duplicate samples taken and comparing them to criteria specified in **Table 1-5**. The QA/QC Officer also examines data in light of historic data for trends, and performs outlier checks as necessary. The data is considered valid if the QA checks on the data do not indicate any significant deviations from the data quality criteria in **Section 1.5.1**.

The QA/QC officer is responsible for advising the Project Manager about any appropriate actions that may be needed, such as re-sampling. If data do not meet data quality objectives (DQOs) specified in **Section 1.5**, the QA/QC officer prepares a report detailing which objectives are not met and which data are involved. The QA/QC office also provides recommendations for correcting the deficiencies and obtaining valid data to the Environmental / Project Manager, who is responsible for acting on those recommendations.

### **4.3 Reconciliation with Data Quality Objectives**

The Environmental / Project Manager is responsible for reconciling the results from the monitoring program described in this QAPP with the DQO's and other requirements specified in both this QAPP and the reuse Permit. The Environmental / Project Manager:

- reviews the Data Verification and Validation reports from the QA/QC Officer
- considers how well the data represents actual conditions at the sampling location.

Once the data has been validated, the Environmental / Project Manager reviews the data to determine if there have been any permit or regulatory exceedances, and if there is need for any permit-required re-sampling, confirmatory sampling, or mandated reporting to DEQ, and resolves those needs.

## Section 5 MEDIA-SPECIFIC MONITORING

### 5.1 Recycled Water and Surface Water Monitoring

This section discusses both recycled water and irrigation water monitoring, analytical methods used, sampling equipment used, sampling procedures, sample collection, and decontamination procedures.

#### 5.1.1 Monitoring

This discussion of recycled water and surface water monitoring section includes information for identification, description, and location of monitoring points, their assigned serial numbers, sample types and frequencies, and parameters, all of which are specified in **Table 5-1**.

**Table 5-1. Recycled water and Surface Water Monitoring**

Monitoring Point Serial # /Location	Sample Description	Sample Type / Frequency	Parameters
Influent Flow Meter	Flow rate of wastewater into treatment system	Daily	Gallons/Day Gallons/month
Effluent Flow Meter	Flow rate of reclaimed water to the RI system	Daily	Gallons/day Gallons/month
RI system	Dates of usage	Daily	NA
WW-108-01 Point of discharge to RIBs	Recycled water from LG-108-01 to all RIBs	Grab sample: Monthly	Total Kjeldahl nitrogen, as N Nitrite + nitrate-nitrogen, as N Total phosphorus, as P Ph (Standard Units) Chloride Total coliform organisms/100mL <sup>a</sup> Total Residual Chlorine <sup>a</sup>
SW-108-01 SW-108-02 SW-108-03 SW-108-04 <sup>b</sup>	Surface water of Mores Creek	Field measurements: monthly <sup>c</sup>	pH (Standard Units) Temperature (°C) Dissolved Oxygen Total Residual Chlorine
		Grab sample: monthly <sup>c</sup>	Parameters for Lab Analysis Total Kjeldahl nitrogen, as N Nitrite + nitrate-nitrogen, as N Total phosphorus, as P Ammonia Biochemical Oxygen Demand (BOD <sub>5</sub> ) Chloride E. coli (organisms/ 100 mL) <sup>d</sup>

Monitoring Point Serial # /Location	Sample Description	Sample Type / Frequency	Parameters
<p>Notes:</p> <p>a. Weekly grab sample required if the permittee discharges Class C recycled water to the RIBs (IDAPA 58.01.17.601.03).</p> <p>b. Notify IDEQ if snow or ice prohibits collection of surface water samples.</p> <p>c. Monthly for first two years of the permit and quarterly thereafter (February, May, August, and November) if constituent levels do not exceed thresholds determined in CA-108-04 and approved by IDEQ.</p> <p>d. The permittee shall notify IDEQ's Boise Regional Office immediately if any surface water sample analysis, either in the upstream or downstream locations shows coliform counts that exceed 406 E. coli organisms per 100mL (IDAPA 58.01.02.251.01.b.ii).</p>			

### 5.1.2 Analytical Methods

This section discusses analytical methods used for recycled water (Table 5-2) and surface water (Table 5-3), including preservative requirements and holding time requirements.

**Table 5-2. Wastewater Analytical Methods**

Parameter	Abbrev.	Units <sup>1</sup>	EPA <sup>2</sup>	Standard Methods <sup>3</sup>	Minimum Reporting Level <sup>4</sup>	Preservative	Maximum Holding Time
pH	—	S.U.	150.1	4500-H*	>1, <12	None required	Analyze immediately in field; <48 hours for laboratory analysis
Biochemical Oxygen Demand (5 days, 20 °C)	BOD <sub>5</sub>	mg/L	405.1	5210 B		None required	48 hours
Dissolved Oxygen	DO	mg/L	360.2	4500 O	>0	None required	Analyze immediately in field
Ammonia	NH <sub>3</sub>	mg/L	350.1	4500 NH <sub>3</sub>	<0.01 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days
Chemical Oxygen Demand	COD	mg/L	410.1 410.4	5220 B		Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days
Electrical Conductivity	EC	µmhos/cm	120.1	2510 B	<2 µmhos/cm	Cool, 4 °C	28 days
Total Dissolved Solids (or Total Filterable Residue)	TDS	mg/L	160.2	2540 C	<3 mg/L	Cool, 4 °C	7 days
Fixed Solids (i.e., non-volatile solids)	FS	mg/L	—	2540C with 2540 E			
Total Kjeldahl Nitrogen	TKN	mg/L	351.1, 351.2, 351.3, 351.4, or 300.0	4500-Norg	<0.2 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days
Nitrate and Nitrite (both as N)	NO <sub>3</sub> -N + NO <sub>2</sub> -N	mg/L	353.1, 353.2 or 353.3	4500-NO <sub>3</sub> + 4500-NO <sub>2</sub>	<0.2 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days
Total Phosphorus	P	mg/L	365.4	4500-P (or ASTM D515-88)	<0.05 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days
Sodium	Na	mg/L	200.7*	3500-Na	<0.1 mg/L*	HNO <sub>3</sub> to pH<2	6 months

Parameter	Abbrev.	Units <sup>1</sup>	EPA <sup>2</sup>	Standard Methods <sup>3</sup>	Minimum Reporting Level <sup>4</sup>	Preservative	Maximum Holding Time
Potassium	K	mg/L	200.7*	3500-K	<0.5 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Calcium	Ca	mg/L	200.7*	3500-Ca	<0.1 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Magnesium	Mg	mg/L	200.7*	3500-Mg	<0.1 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Alkalinity	Alk	mg/L	310.1 or 310.2	2320	—	Cool, 4 °C	14 days
Sulfate	SO <sub>4</sub>	mg/L	375.1, 375.2, 375.3, 375.4, or 300.0*	4500-SO <sub>4</sub> <sup>2-</sup>	<2.5 mg/L*	Cool, 4 °C	28 days
Chloride	Cl	mg/L	325.1, 325.2, 325.3, or 300.0*	4500-Cl <sup>-</sup>	<1.0 mg/L*	None required	28 days
Total Coliform	TC	CFU/100 mL	—	9221B	—	Cool, <10 °C (in presence of chlorine, add Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> )	6 hours

Notes:

1. Unit abbreviations: S.U. – standard units; mg/L – milligrams per liter; µmhos/cm – micromhos per centimeter; CFU/100mL – colony-forming units per 100 milliliters.
  2. EPA Methods and Guidance for the Analysis of Water, Version 2.0. EPA 821/C-99-004. June 1999. For further approved methods, see US Code of Federal Regulations, CFR 40 § 136.3, Tables 1A and 1B.
  3. Greenberg, A.E. et al. (eds). 1992. Standard Methods for the Examination of Water and Wastewater - 18th Edition.
  4. The minimum reporting levels are method-specific
- \* Asterisk indicates Personal communication J. Hibbs, Analytical Laboratories to M. Cook. April 27, 2009.

**Table 5-3. Irrigation and Surface Water Analytical Methods**

Parameter	Abbreviations	Units	EPA <sup>1</sup>	Standard Methods <sup>2</sup>	Minimum Reporting Level <sup>3</sup>	Preservative	Holding Time
Total Dissolved Solids (or Total Filterable Residue)	TDS	mg/L	160.25	2540 C5	<3 mg/L	Cool, 4 °C	7 days
Total Kjeldahl Nitrogen	TKN	mg/L	351.1, 351.2, 351.3, 351.4, or 300.0	4500-Norg	<0.2 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days
Nitrate and Nitrite (both as N)	NO <sub>3</sub> -N + NO <sub>2</sub> -N	mg/L	353.1, 353.2 or 353.3	4500-NO <sub>3</sub> + 4500-NO <sub>2</sub>	<0.2 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days
Total Phosphorus	P	mg/L	365.4	4500-P (or ASTM D515-88)	<0.05 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days

**Notes:**

1. EPA Methods and Guidance for the Analysis of Water, Version 2.0. EPA 821/C-99-004. June 1999. For further approved methods, see US Code of Federal Regulations, CFR 40 § 136.3, Tables 1A and 1B.
2. Greenberg, A.E. et al. (eds). 1992. Standard Methods for the Examination of Water and Wastewater - 18th Edition.
3. The minimum reporting levels are method-specific

### 5.1.3 Typical Sampling Equipment

The equipment and supplies used for sampling irrigation water and recycled water typically include the following items:

- disposable gloves
- dipper
- documentation (field sheets, chain of custody records, log books, O&M manuals, etc.)
- indelible ink pen
- field parameter meters with calibration standards
- decontaminated composite sampler with proper tubing and power supply
- plastic (HDPE), or glass 1-liter (1L) sample bottles
- sample labels
- packing tape
- cooler with cold packs or ice
- cleaning buckets and containers for decontamination
- paper towels and hand soap
- cleaning brushes

- phosphate-free laboratory soap
- deionized organic-free water and hand sprayers
- tin foil

The facility and contract laboratories will provide sampling containers and preservatives. The laboratories will also supply chain of custody records.

#### **5.1.4 Recycled Water and Surface Water Sampling Procedures**

1. Coordinate with the laboratory regarding sampling and delivery of samples prior to sampling. Follow all instructions provided by the analytical laboratory.
2. Collect the sample. See **Section 5.1.5**.
3. Label the samples with durable labels and water-resistant ink to provide proper identification. Provide the following information on each label:
  - project identification (often a project name)
  - sample identification number
  - sampling point serial number
  - date and time of collection
  - name of sample collector
4. Follow laboratory instructions for preservation of the collected samples. Once collected, place the samples on ice in an ice chest, in which the temperature is approximately 4°C +/- 2°C, from the time of sampling until the analysis is complete, if this is required for sample preservation. For all samples, transport them in ice chests with ice packs and chain of custody records.
5. For all samples, complete field sampling sheet(s) (**Appendix A**) and chain of custody records (**Appendix B**) at the time of sample collection. Keep field sampling sheets with monitoring records. Put the chain of custody record in a sealable plastic bag and place it with the samples.
6. Transport samples to contract laboratories within holding time limitations. Where the in-house facility laboratory is used, deliver the samples directly to the facility laboratory manager or designee, who will sign the chain of custody form and receive samples into his custody.

#### **5.1.5 Collecting the Recycled Water / Surface Water Sample**

To obtain a grab sample, do the following:

- For a sample from a moving recycled water stream, a sampling point accessed by a valve is purged for about 30 to 60 seconds, depending upon the length of the bypass from the recycled water stream to the valve.

- For recycled water sampled from a lagoon, a dipper with extension handle shall be used to obtain a sample at a point as close to the pond outlet (to land application) as possible, and at approximately the same depth as the outlet pipe if possible.
- For recycled water samples taken with composite samplers, the purging protocol(s) specified for the sampler shall be used.
- For irrigation water, the sample should be taken near to where it is being diverted for irrigation use.
- Collect the sample directly into the appropriate container (e.g. 1- liter cubitainers equipped with screw-on caps) and sealed as quickly as possible. For irrigation water, sample containers will be new, clean, and used only once during the sampling event. For recycled water, a dedicated container which is cleaned between sampling events is acceptable.
- Collect duplicate samples of both recycled water and irrigation water as described in **Section 1.5.1.1**.

### 5.1.6 Decontamination Procedures

Before each use of a sampling dipper, decontaminate it by washing with a weak solution of Alcanox® detergent and rinsing it once with 10% bleach solution, then rinsing twice more with distilled water. The dedicated container and all portions of the sampling equipment that come into contact with recycled water are required to be decontaminated. Decontaminate a composite sampler according to procedures outlined in the manual of operation for the sampler.

## 5.2 Ground Water Monitoring

For ground water monitoring, this section discusses analytical methods used, sampling equipment used, sampling point purging procedures, sample collection procedures, and decontamination procedures.

### 5.2.1 Monitoring

This ground water monitoring discussion includes information for identification, description, and location of monitoring points, their assigned serial numbers, sample types and frequencies, and parameters, all of which are specified in **Table 5-4** and **Table 5-5**.

**Table 5-4. Ground Water Monitoring Point Descriptions**

Monitoring Point Serial Number	Common Designation	Well Type	Gradient Location
GW-108-01	Well 1	Monitoring well	Upgradient
GW-108-02	Well 2	Monitoring well	Midgradient (between RIB 3 and 4)
GW-108-03	Well 3	Monitoring well	Downgradient of MU-108-01
GW-108-04	Well 4	Monitoring well	Midgradient (between RIB 3 and 4)
GW-108-05	Well 5	Monitoring well	Downgradient of LG-108-01



Monitoring Point Serial Number	Common Designation	Well Type	Gradient Location
GW-108-06	Well 6	Monitoring well	Midgradient (next to LG-108-01)
GW-108-07	Well 7	Monitoring well	Downgradient of LG-108-01

**Table 5-5. Ground Water Monitoring**

Monitoring Point Serial Number(s)	Sampling Point Description	Sample Type / Frequency	Parameters
GW-108-01 GW-108-02 GW-108-03 GW-108-04 GW-108-05 GW-108-06	Monitoring wells	Unfiltered grab samples quarterly (unless otherwise specified): February, May, August and November	<ul style="list-style-type: none"> <li>- Water table elevation (feet amsl)</li> <li>- Water table depth (feet)</li> <li>- Specific conductance/ electrical conductivity (<math>\mu\text{mhos/cm}</math>)</li> <li>- Temperature (<math>^{\circ}\text{C}</math>)</li> <li>- pH (standard units)</li> <li>- Total Kjeldahl Nitrogen</li> <li>- Nitrate-Nitrogen, as N</li> <li>- Total Phosphorus, as P</li> <li>- Total Dissolved Solids</li> <li>- Chloride</li> <li>- <i>E. coli</i> (organisms/100 mL)<sup>a</sup></li> </ul>
<p>a. <i>E. coli</i> analysis sensitivity for ground water samples must be capable of producing results of 1 organism/100 mL.</p>			

### 5.2.2 Analytical Methods

This section discusses analytical methods used for ground water (Table 5-6), including preservative requirements and holding time requirements.

**Table 5-6. Ground Water Analytical Methods**

Parameter	Abbreviations	Units <sup>1</sup>	EPA <sup>2</sup>	Standard Methods <sup>3</sup>	Minimum Reporting Level <sup>4</sup>	Preservative	Holding Time
Alkalinity	Alk	mg/L	310.1 or 310.2	2320	<1.0 mg/L	Cool, 4 $^{\circ}\text{C}$	14 days
pH	pH	S.U.	150.1	4500-H <sup>+</sup>	> 1, <12	None Required	Analyze immediately in field; <48 hours for laboratory analysis
Specific Conductance	SC	$\mu\text{mhos/cm}$	120.1	2510 B	<2 $\mu\text{mhos/cm}$	Cool, 4 $^{\circ}\text{C}$	28 days

Parameter	Abbreviations	Units <sup>1</sup>	EPA <sup>2</sup>	Standard Methods <sup>3</sup>	Minimum Reporting Level <sup>4</sup>	Preservative	Holding Time
Total Dissolved Solids (inorganic)	TDS	mg/L	160.2	2540 C	<3.0 mg/L	Cool, 4 °C	7 days
Static Water Level	SWL	Feet	NA <sup>5</sup>	steel tape, electric tape or other	<0.01 ft	—	—
Nitrate and Nitrite (both as N)	NO <sub>3</sub> -N + NO <sub>2</sub> -N	mg/L	352.1	4500-NO <sub>3</sub>	<0.2 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days
Iron: Total for domestic and municipal wells; Dissolved for monitoring wells	Fe	mg/L	236.1 200.7*	3500-Fe	<.05 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Manganese: Total for domestic and municipal wells; Dissolved for monitoring wells	Mn	mg/L	200.7*	3500-Mn	<.005 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Sodium	Na	mg/L	200.7*	3500-Na	<0.1 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Potassium	K	mg/L	200.7*	3500-K	<0.5 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Chloride	Cl	mg/L	325.1, 325.2, or 325.3 300.0*	4500-Cl	<1 mg/L	None Required	28 days
Calcium	Ca	mg/L	200.7*	3500-Ca	<0.1 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Magnesium	Mg	mg/L	200.7*	3500-Mg	<0.1 mg/L*	HNO <sub>3</sub> to pH<2	6 months
Phosphorus Total	P	mg/L	365.4	4500-P	<0.05 mg/L	Cool, 4 °C H <sub>2</sub> SO <sub>4</sub> to pH<2	28 days

Parameter	Abbreviations	Units <sup>1</sup>	EPA <sup>2</sup>	Standard Methods <sup>3</sup>	Minimum Reporting Level <sup>4</sup>	Preservative	Holding Time
Sulfate	SO <sub>4</sub>	mg/L	375.1, 375.2, 375.3, 375.4, or 300.0*	4500-SO <sub>4</sub> <sup>2-</sup>	<2.5 mg/L*	Cool, 4 °C	28 days

**Notes:**

1. Unit abbreviations: mg/L – milligrams per liter; S.U. – standard units; μmhos/cm – micromhos per centimeter.
  2. EPA Methods and Guidance for the Analysis of Water, Version 2.0. EPA 821/C-99-004. June 1999. For further approved methods, see US Code of Federal Regulations, CFR 40 § 136.3, Tables 1A and 1B.
  3. Greenberg, A.E. et al. (eds). 1992. Standard Methods for the Examination of Water and Wastewater - 18th Edition.
  4. The minimum reporting levels are method-specific.
  5. NA – not applicable
- \* Asterisk indicates Personal communication J. Hibbs, Analytical Laboratories to M. Cook. April 27, 2009.

### 5.2.3 Typical Sampling Equipment

For sampling ground water, the following supplies and equipment are typically used.

- disposable gloves
- documentation (field sheets, chain of custody records, log books, O&M manuals, etc.)
- indelible ink pen
- well lock keys
- tape measure, water level monitoring device, and supplies (batteries, chalk, and paste as needed)
- field parameter meters with calibration standards
- decontaminated sampling pump with proper tubing and power supply
- bailers
- bailer line (Teflon®-coated wire, single strand stainless steel wire, or other monofilament line)
- plastic (HDPE) 1-liter sample bottles
- sample labels
- packing tape
- stop watch
- graduated cylinder
- filtration equipment
- cooler with cold packs or ice
- cleaning buckets and containers
- plastic garbage bags
- small sealable plastic bags
- plastic sheeting
- paper towels and hand soap
- cleaning brushes
- phosphate-free laboratory soap
- deionized organic-free water and hand sprayers
- high purity laboratory grade hexane, acetone, or isopropanol (all available from laboratory supply companies)

#### 5.2.4 Well Purging Procedures

Water level measurements must be taken *before the well is purged*. After any water level measurements are taken, purge the well until a representative ground water sample can be collected. To measure static water, do the following.

1. From a permanent reference point at the top of the well casing, lower a clean weighted steel tape or electric sounder into the well.
2. Record the wet level mark on the tape and subtract it from the reference point level to obtain the water depth measurement. Use the same reference point each time a water level measurement is made at the well.

Purge ground water monitoring wells for a minimum of three casing volumes and/or until field parameter measurements (i.e. temperature, pH, DO, EC) stabilize. This procedure will determine when the wells are suitable for sampling required by the permit. To consider the parameter measurements stabilized, the following conditions must be met:

- two successive temperature values measured at least five minutes apart are within 1 degree Celsius of each other,
- pH values for two successive measurements, measured at least five minutes apart, are within 0.2 units of each other
- two successive specific conductance values, measured at least five minutes apart, are within 10% of each other.

To calculate casing volume, use **Equation 2** (from EPA. U.S. Environmental Protection Agency, 1995. Groundwater Well Sampling. SOP#:2007. January 26, 1995. Revision #: 0.0; section 8.0):

$$V_w = 7.48 \pi r^2 h \quad \text{Equation 2. Determining Casing Volume Using Well Radius.}$$

Where:

$V_w$  = well volume (gallons)

$r$  = inside radius of the well (feet)

$h$  = height of the water column (feet).

Subtract depth to water from total depth of well.

Alternatively, **Equation 3** can be used for convenience:

$$V_w = 0.041 d^2 h \quad \text{Equation 3. Determining Casing Volume Using Well Diameter}$$

Where:

$V_w$  = well volume (gallons)

$d$  = inside diameter of the well (inches)

$h$  = height of the water column (feet)

**Table 5-7** provides gallons per foot of water based upon the diameter of the well.

**Table 5-7. Gallons Per Foot of Water Expected Based on Various Well Diameters**

Well Diameter (Inches)	Gallons per Foot of Water
1.0	0.041
1.25	0.064
2.0	0.16
3.0	0.36
4.0	0.65
6.0	1.5

Avoid purging the well dry and sampling the next day after the well has recovered, if possible. There are circumstances, however, in which this may be the only option. Keep purge rates below the rate at which the well was developed (if known).

If a pump is not available or cannot be used, use a bottom-emptying bailer to purge the well (and to collect samples). To purge using a bailer, lower the bailer slowly until it is just below the water level, then retract it slowly to reduce aeration and turbidity. Collect the purged water in a graduated bucket to measure a minimum of at least three well volumes, or as specified above. Use bailer lines that consist of Teflon-coated wire, single strand stainless steel wire, or other monofilament line.

### 5.2.5 Ground Water Sample Collection Procedures

1. Coordinate with the laboratory regarding sampling and delivery of samples prior to sampling. Follow all instructions provided by the analytical laboratory.
2. Begin purging. Once the sampling point has been purged according to the criteria in **Section 5.2.4**, collect the ground water sample.
3. Collect the sample collected directly into the appropriate container (e.g. 1-liter cubitainers equipped with screw-on caps) and seal it as quickly as possible. Collect duplicate ground water samples at a minimum number of 5% of the samples taken on an annual basis as described in **Section 1.5.1.1**.
4. Label the samples with durable labels and water-resistant ink to provide proper identification. Provide the following information on each label:
5. project identification (often a project name)
6. sample identification number
7. sampling point serial number
8. date and time of collection
9. name of sample collector

10. Follow laboratory instructions for preservation of the collected samples. Once collected, place the samples on ice in an ice chest, in which the temperature is approximately 4°C +/- 2°C, from the time of sampling until the analysis is complete, if this is required for sample preservation. Transport all samples in ice chests with ice packs and chain of custody records.
11. For all samples, complete field sampling sheet(s) (**Appendix A**) and chain of custody records (**Appendix B**) at the time of sample collection. Keep field sampling sheets with monitoring records. Put the chain of custody record in a sealable plastic bag and place it with the samples.
12. Transport samples the same day to contract laboratories within holding time limitations. Where the in-house facility laboratory is used, deliver samples directly to the Facility Laboratory Manager or designee.

#### *5.2.5.1 Sample Collection with Pumps*

When sampling with a portable pump, do the following:

1. Have sample containers ready before turning on the pump.
2. Lower the pump, slowly, to the desired depth in the well. The placement of the intake valve on the pump should be considered during sampling in order to create the minimum disturbance to the stagnant water above and below the screened interval.
3. Adjust the flow rate to less than 100 mL per minute to reduce agitation.
4. After collecting the sample, decontaminate the pump according to the manufacturer's recommendations for the specific analyte(s) before moving to the next well.

#### *5.2.5.2 Sample Collection with Bailers*

When sampling with a bailer, do the following:

1. Take precautions to minimize turbidity and sediment in samples. This will minimize the need for filtering.
2. Lower the bailer slowly into the well, avoiding agitation, and allow it to fill.
3. Retract the bailer slowly and discharge the sample carefully into the container until the correct volume has been collected.
4. Add preservative if required, cap the container, and mix according to laboratory instructions.

#### *5.2.5.3 Minimizing Risk of Contamination*

To minimize risk of contamination during sampling, do the following:

- Select all sampling equipment (bailers, tubing, containers, etc.) based on compatibility with parameters to be monitored, using new sample containers when sampling for compliance monitoring; do not reuse ground water sample containers.

- Verify that all sampling equipment has been thoroughly cleaned.
- Keep containers closed before filling, and do not touch the insides of containers or caps.
- Wear a new pair of disposable gloves or decontaminated reusable gloves for each sampling site.
- Place new plastic sheeting on the ground near each well to hold the sampling equipment; do not step on the sheeting. Alternatively, if a truck is used during sampling, sampling equipment may be staged in the truck bed.
- Avoid unnecessary handling of samples where dedicated monitoring systems (those permanently installed in wells) are **not** used.
- Clean equipment to be reused thoroughly before sampling each well to minimize the risk of cross-contamination.
- Take enough pre-cleaned equipment to the field to sample each well, so that cleaning between wells is unnecessary.

#### **5.2.6 Decontamination Procedures**

Routinely decontaminate all sampling equipment that is not dedicated before collecting a sample. Decontamination is conducted according to appropriate sampling procedures. Select the cleaning procedures based on the equipment composition and the parameters to be monitored.

The following is a summary of minimum cleaning techniques for Teflon® bailers, applicable for other equipment of the same composition.

1. wash with phosphate-free soap and hot tap water wash
2. rinse with hot tap water
3. rinse with 10% nitric acid (omit this step for stainless steel bailers and equipment)
4. rinse with deionized water
5. rinse with isopropyl alcohol
6. rinse with deionized water
7. air dry
8. wrap the bailer with aluminum foil or other material to prevent contamination before use; consider target contaminants when selecting a wrap material.

### **5.3 Soil Monitoring**

Soil Monitoring Not Required

### **5.4 Plant Tissue and Crop Monitoring**



Plant Tissue and Crop Monitoring Not Required

## 5.5 Hydraulic Management Unit Calculations and Reporting

This section provides descriptions of hydraulic management units (HMUs) and discusses hydraulic and constituent load monitoring and calculations.

The HMU is the basis upon which several calculations are made. The HMUs for permit no. M-108-04 are defined in **Table 5-8** and the various calculations related to them are listed in **Table 5-8**. Both recycled water and irrigation water flows, as well as constituent concentrations, are used in loading calculations. Specific instructions for making these calculations can be found in the Idaho Guidance for Recycled Water<sup>1</sup>, in **Section 4.2.1** and **Section 4.4.13**.

**Table 5-8. Hydraulic Management Unit Descriptions.**

Serial Number	Description <sup>a</sup>	Acres <sup>a</sup>
MU-108-01 <sup>b</sup>	RIB 1	0.47
MU-108-02	RIB 2	0.47
MU-108-03	RIB 3	0.47
MU-108-04	RIB 4	0.47
<b>Total Acreage</b>		<b>1.88</b>

- a. *Maximum acres represent the total permitted acreage of the MU as provided by the permittee. If the permittee uses less acreage in any season or year, then loading rates shall be presented and compliance shall be determined based on the actual acreage used during each season or year.*
- b. *Only Class C recycled water can be discharged to this RIB.*

**Table 5-9. Hydraulic Management Unit Calculations and Reporting**

Monitoring Point Serial Number(s)	Parameter (calculate for each HMU)	Units
MU-108-01	Recycled water hydraulic loading rate	gallons/month
MU-108-02		gallons/day <sup>a</sup>
MU-108-03	Recycled water nitrogen and phosphorous loading rates	- pounds / month - pounds / year
MU-108-04	Visual observation of field conditions: (areas of ponding, ice, unusual conditions, etc).	

- a. *Record which RI basin is in use.*

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## APPENDIX A – REUSE PERMIT SAMPLING FIELD SHEET EXAMPLE

Sampling Point ID#: \_\_\_\_\_ Sampler Name (s): \_\_\_\_\_

Sample Location Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Sample Date: \_\_\_\_\_ Sample Time: \_\_\_\_\_

Facility Name: \_\_\_\_\_ Address: \_\_\_\_\_

**SAMPLE MEDIA** (Check appropriate Boxes)

Recycled water     Irrigation Water     Surface Water     Ground Water     Soil     Sludge  
 Plant Tissue     Other (describe) \_\_\_\_\_

**SAMPLE TYPE** (Check appropriate Boxes)

Grab     Composite     Other     Other (describe) \_\_\_\_\_

**PRESERVATION METHOD**     Cooled 4C     Other (Describe) \_\_\_\_\_

**SAMPLING DEVICES USED** (make and model) \_\_\_\_\_

**ANALYSES REQUESTED AND SAMPLE METHOD**

Analysis	Method	Analysis	Method	Analysis	Method

**DECONTAMINATION METHOD** \_\_\_\_\_

**ANALYTICAL LABORATORY** \_\_\_\_\_

**Field Parameter Measurements**

<b>Time</b>	<b>Temp (°C)</b>	<b>pH</b>	<b>Specific Conductivity (µS/cm)</b>	<b>Dissolved Oxygen (mg/L)</b>	<b>Turbidity (NTU)</b>	<b>Sample Collected (Yes/No)</b>

**Sample Information**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Date (Mo/Day/Yr)</b>	<b>Time (Military)</b>	<b>Comments</b>

**Other Observations**

Sample Color: \_\_\_\_\_ Sample Odor: \_\_\_\_\_  
 Sampling Problems: \_\_\_\_\_  
 Other Observations: \_\_\_\_\_  
 \_\_\_\_\_

*Continue on Reverse if necessary →*

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## **APPENDIX B – CHAIN OF CUSTODY RECORD**







**ORDINANCE NO. 382**

AN ORDINANCE OF THE CITY OF IDAHO CITY, BOISE COUNTY, IDAHO, CHANGING THE COMMENCEMENT OF CHARGES FOR WATER AND SEWER FOR NEW CONSTRUCTION AND PROVIDING FOR AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF IDAHO CITY, IDAHO:

SECTION 1. That Title 9, Chapter 1, Section 27, Paragraph B (section 28 of Ordinance 213) of the City Code of Idaho City be amended to read as follows:

9-1-27: MONTHLY CUSTOMER CHARGES:

B. New Construction: In the case of new construction, a monthly charge will begin when the service connection has been inspected and approved or when the building being served is substantially completed, whichever is the ~~latest~~ earlier date.

SECTION 2. That Title 9, Chapter 2, Section 30, Paragraph B (section 31 of Ordinance 183) of the City Code of Idaho City be amended to read as follows:

9-2-30: MONTHLY CUSTOMER CHARGES:

B. New Construction: For new construction, this would be when the service connection has been inspected and approved or when the building being served is substantially completed, whichever is the ~~latest~~ earlier date.

SECTION 3. That this ordinance shall be in full force and effect upon passage, approval, and publication according to law.

PASSED BY THE COUNCIL of the City of Idaho City this \_\_\_\_ day of July, 2023.

APPROVED BY THE MAYOR of the City of Idaho City this \_\_\_\_ day of July, 2023.

\_\_\_\_\_  
Kenneth Everhart, Mayor

ATTEST:

\_\_\_\_\_  
Nancy L. Ptak, City Clerk - Treasurer

the study. The authors are grateful to the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the financial support.

#### REFERENCES

- ALMEIDA, M. R. D., DE SOUZA, J. M. F., DE SOUZA, A. M. & DE SOUZA, R. M. (2001) *Pharmacokinetics of the anti-HIV-1 drug zalcitabine in the plasma of HIV-1 infected patients*. *Journal of Clinical Pharmacy and Therapeutics*, **26**, 263–268.
- ALMEIDA, M. R. D., DE SOUZA, J. M. F., DE SOUZA, A. M. & DE SOUZA, R. M. (2002) *Pharmacokinetics of the anti-HIV-1 drug didanosine in the plasma of HIV-1 infected patients*. *Journal of Clinical Pharmacy and Therapeutics*, **27**, 235–240.
- ALMEIDA, M. R. D., DE SOUZA, J. M. F., DE SOUZA, A. M. & DE SOUZA, R. M. (2003) *Pharmacokinetics of the anti-HIV-1 drug zalcitabine in the plasma of HIV-1 infected patients*. *Journal of Clinical Pharmacy and Therapeutics*, **28**, 235–240.
- ALMEIDA, M. R. D., DE SOUZA, J. M. F., DE SOUZA, A. M. & DE SOUZA, R. M. (2004) *Pharmacokinetics of the anti-HIV-1 drug didanosine in the plasma of HIV-1 infected patients*. *Journal of Clinical Pharmacy and Therapeutics*, **29**, 235–240.

#### Correspondence

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(fax: +55 55 3363 3333; e-mail: jmf@fisica.ufpe.br).

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*Journal of Clinical Pharmacy and Therapeutics*, **30**, 1021–1026

#### Erratum

In the article by M. R. D. Almeida, J. M. F. de Souza, A. M. de Souza and R. M. de Souza (2004) *Journal of Clinical Pharmacy and Therapeutics*, **29**, 235–240, the following error occurred:

Equation (1) should be written as follows:

$$C_{\text{plasma}} = \frac{C_{\text{plasma}}^{\text{max}}}{1 + e^{-k_{\text{el}}(t - t_{\text{max}})}} \quad (1)$$

where  $C_{\text{plasma}}$  is the plasma concentration,  $C_{\text{plasma}}^{\text{max}}$  is the maximum plasma concentration,  $k_{\text{el}}$  is the elimination rate constant and  $t_{\text{max}}$  is the time to reach the maximum plasma concentration.

The authors are sorry for the error and thank the referees for their comments.

#### REFERENCES

- ALMEIDA, M. R. D., DE SOUZA, J. M. F., DE SOUZA, A. M. & DE SOUZA, R. M. (2004) *Pharmacokinetics of the anti-HIV-1 drug didanosine in the plasma of HIV-1 infected patients*. *Journal of Clinical Pharmacy and Therapeutics*, **29**, 235–240.

**ORDINANCE NO. 378**

**AN ORDINANCE OF THE CITY OF IDAHO CITY, BOISE COUNTY, IDAHO, AMENDING TITLE 1. CHAPTER 5, OF THE CITY CODE, CHANGING THE REGULAR MEETING TIME FOR CITY COUNCIL MEETINGS, AND PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS, The City Council has determined that the interests of the Citizens of Idaho City would best be served by amending the time of regular monthly City Council meetings.**

**NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF IDAHO CITY, IDAHO:**

**SECTION 1. That the City Code of Idaho City, Section 1-5-1.A (Section 1 of Ordinance 320) of the be amended to read as follows:**

**1-5-1: MEETINGS:**

- A. Regular Meetings:** The Mayor and City Council shall meet in regular session at the City Hall on the second and fourth Wednesday of each month, such meetings to commence at the hour of ~~six~~seven o'clock ~~(6:00)~~(7:00) P.M. During such regular sessions, the Mayor and Council may consider any and all business of the City properly brought before the Council. When a holiday recognized by the City falls on the second or fourth Wednesday, the regular meeting may be moved or canceled at the direction of the City Council.

**SECTION 2. That this ordinance shall be in full force and effect upon passage, approval, and publication according to law.**

**PASSED BY THE COUNCIL of the City of Idaho City this \_\_\_\_ day of July, 2023.**

**APPROVED BY THE MAYOR of the City of Idaho City this \_\_\_\_ day of July, 2023.**

---

**Kenneth Everhart, Mayor**

**ATTEST:**

---

**Nancy L. Ptak, City Clerk - Treasurer**

the 1990s, the number of people with a mental health problem has increased in the UK (Mental Health Act 1983, 1990).

There is a growing awareness of the need to improve the lives of people with mental health problems. The Department of Health (1999) has set out a strategy for mental health care, which includes a commitment to improve the lives of people with mental health problems.

The Department of Health (1999) has set out a strategy for mental health care, which includes a commitment to improve the lives of people with mental health problems. The strategy is based on the following principles:

• To improve the lives of people with mental health problems.

• To improve the lives of people with mental health problems.

• To improve the lives of people with mental health problems.

• To improve the lives of people with mental health problems.

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• To improve the lives of people with mental health problems.

• To improve the lives of people with mental health problems.

**RESOLUTION NO. 2023-09**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IDAHO CITY, IDAHO,  
AUTHORIZING THE MAYOR TO EXECUTE A LEASE AGREEMENT WITH THE COMMITTEE  
OF WATER DISTRICT NO. 63 FOR THE TEMPORARY LEASE OF WATER RIGHTS.**

**WHEREAS**, the City has a water right with the priority date of 1945 out of Elk Creek;

**WHEREAS**, the Idaho City water right is now out of priority;

**WHEREAS**, the City's inability to provide water is an imminent peril to the public health, safety, and welfare of the citizens of Idaho City, such that City must secure additional water rights to serve its citizens; and

**WHEREAS**, the Committee of Water District No. 63 has the ability and authority to lease water rights from the Boise River Rental Pool to the City to meet the City's immediate needs.

**NOW, THEREFORE, BE IT RESOLVED** by the Mayor and City Council of the City of Idaho City, Idaho, that the City Council hereby authorizes the Mayor to enter into a lease agreement with the Committee of Water District No. 63 for the lease of water rights to the City from the Boise River Rental Pool in the format provided by the Water District.

**PASSED BY THE COUNCIL** of the City of Idaho City this \_\_\_\_ day of July, 2023.

**APPROVED BY THE MAYOR** of the City of Idaho City this \_\_\_\_ day of July, 2023.

\_\_\_\_\_  
Kenneth Everhart, Mayor

ATTEST:

\_\_\_\_\_  
Nancy L. Ptak, City Clerk/Treasurer

the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion.

There are a number of reasons why the number of children in the world is increasing. One of the main reasons is that the number of children who are surviving to the age of 15 is increasing. This is due to a number of factors, including improved medical care, better nutrition, and a decrease in child mortality.

Another reason why the number of children in the world is increasing is that the number of children who are being born is increasing. This is due to a number of factors, including a decrease in the age at which women are having children, and an increase in the number of children who are being born to women who are already having children.

There are a number of other factors that are contributing to the increase in the number of children in the world. These include a decrease in the number of children who are being adopted, and an increase in the number of children who are being born to women who are already having children.

The increase in the number of children in the world is a cause for concern. This is because the number of children who are living in poverty is increasing, and the number of children who are being abused is increasing. It is important that we take action to address these issues.

There are a number of ways in which we can address these issues. One of the most important ways is to improve the quality of education for children. This will help to ensure that children are able to reach their full potential, and that they are able to contribute to their communities.

Another important way to address these issues is to improve the quality of health care for children. This will help to ensure that children are able to survive and thrive, and that they are able to lead healthy and productive lives.

There are a number of other ways in which we can address these issues. These include providing support for women who are already having children, and providing support for children who are being abused.

The increase in the number of children in the world is a challenge that we must face. It is important that we take action to address these issues, and that we ensure that all children are able to reach their full potential.

There are a number of ways in which we can address these issues. One of the most important ways is to improve the quality of education for children. This will help to ensure that children are able to reach their full potential, and that they are able to contribute to their communities.

Another important way to address these issues is to improve the quality of health care for children. This will help to ensure that children are able to survive and thrive, and that they are able to lead healthy and productive lives.

There are a number of other ways in which we can address these issues. These include providing support for women who are already having children, and providing support for children who are being abused.

The increase in the number of children in the world is a challenge that we must face. It is important that we take action to address these issues, and that we ensure that all children are able to reach their full potential.

**BOISE RIVER RENTAL POOL LEASE AGREEMENT  
FOR 20\_\_\_\_\_**

The Committee of Water District No. 63 being authorized pursuant to Idaho Code Section 42-1765 to lease stored water which has been provided to the Boise River Rental Pool by water users who own reservoir space and have excess supplies for the current year, does agree to sell \_\_\_\_\_ (entity), \_\_\_\_\_ A.F. of water requested for \_\_\_\_\_ (use). This agreement is subject to the adopted Rules and Regulations of the Boise River Rental Pool and execution of same by the party herein named.

Upon receipt of \$\_\_\_\_\_ and the information requested below, the Boise River Watermaster will release to you from storage at the rate you specify \_\_\_\_\_ A.F. of stored water between \_\_\_\_\_ and \_\_\_\_\_ of 20\_\_\_\_\_.

Description of point of diversion:

Located in \_\_\_\_\_ ¼ \_\_\_\_\_ ¼, Sec. \_\_\_\_\_, T. \_\_\_\_\_, R. \_\_\_\_\_;

Other: \_\_\_\_\_

On Source: \_\_\_\_\_

Pump H.P. \_\_\_\_\_ Lift \_\_\_\_\_

Headgate \_\_\_\_\_ (cancel name if appropriate)

Description of place of use:

Legal Description: \_\_\_\_\_

Total number of acres irrigated \_\_\_\_\_

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

\_\_\_\_\_  
(name)

\_\_\_\_\_  
(address)

State of Idaho )  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_, before me the undersigned Notary Public in and for said county and state, personally appeared \_\_\_\_\_, known to be to be the person whose name is subscribed to within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I \_\_\_\_\_ have hereto set me hand and affixed my official seal, the day and year in this certificate first written.

\_\_\_\_\_  
Notary Public in and for Idaho

Residing at: \_\_\_\_\_

I have accepted the request of \_\_\_\_\_ to purchase water from the Boise River Rental Pool this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

\_\_\_\_\_  
Watermaster, Water District No. 63  
Agent for the Committee of Water



the 1990s, the number of people with a mental health problem has increased in the UK (Mental Health Act 1983, 1990).

There is a growing awareness of the need to address the needs of people with mental health problems in the community. This has led to the development of a range of services, including community mental health teams, crisis teams, and day centres.

One of the key challenges for these services is to ensure that they are accessible to all people who need them. This is particularly true for people who are homeless or living in poor housing.

Homelessness is a major problem in the UK, and it is estimated that there are over 1 million homeless people in the country. Many of these people have mental health problems.

People with mental health problems who are homeless are at a higher risk of hospitalization and other health problems. This is because they often lack access to basic services, such as housing and food.

It is therefore essential that services for people with mental health problems take account of their housing needs. This may involve providing housing or other forms of support.

There is a need for more research into the needs of people with mental health problems who are homeless. This will help to develop more effective services for them.

One of the key areas for research is to understand the reasons why people with mental health problems become homeless. This will help to identify the most effective ways of preventing homelessness.

Another key area for research is to understand the needs of people with mental health problems who are homeless. This will help to develop more effective services for them.

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Another key area for research is to understand the needs of people with mental health problems who are homeless. This will help to develop more effective services for them.

There is a need for more research into the needs of people with mental health problems who are homeless. This will help to develop more effective services for them.

To Whom It May Concern

I am interested in being a commissioner on the Idaho City Historic Preservation Commission. I have previously served as a Commissioner on the ICHPC and enjoyed the challenge of maintaining the historic aspects of Idaho City while accommodating new development.

I have served for many years as Chairman of the Idaho City Historical Foundation's Building and Grounds Committee. I also restored the Brogan House at 102 W Wall, Idaho City. Both endeavors require knowledge of building materials and preservation materials. I am in the process of restoring the gardens at the Strauss House on Montgomery St, which is giving me insight into landscaping.

Thank You

Barbara A McClain



Idaho City, Id 83631



**JUL 17 2023**

City of Idaho City  
PO Box 130  
Idaho City, ID 83631

Kay Jackson



Idaho City, ID 83631

**Council Members:**

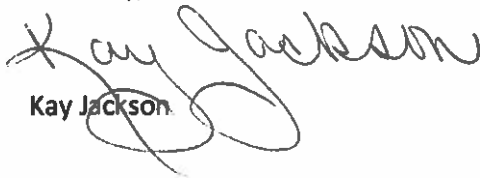
I would like to reapply for membership on the Idaho City Historic Preservation Commission. I have been a member of the Commission since April, 2015. I am familiar with the Historic District and the requirements for appropriateness to make changes within the District.

I have lived in Idaho City and the Mores Creek area nearly all of my life. I attended Dagett Creek School from 1947 to 1953. I have a deep interest in preserving and maintaining the historic character of Idaho City. It is this atmosphere that brings tourists to the area which benefits the local businesses.

I am also a Board Member of the Idaho City Historical Foundation and have been involved in many projects to protect and maintain our historical buildings.

Thank you for your consideration of my application.

Sincerely,

  
Kay Jackson



UTILITY BILLING SYSTEM Report ID: 1086

CITY OF IDAHO CITY

**ADJUSTMENTS**

For Postdate from 07/01/2023 to 07/26/2023 Ordered by ADJUSTMENT NUMBER from AP and Year 7 - 2023

08:05:05 - 07/26/2023

**JOURNAL - Specific**

ALL ADJUSTMENT NUMBERS

**Type**

ALL ACCOUNTS

**ADJUSTMENT TYPES:** BILLING CORRECTION CONSUME CORRECTION NO ADJUSTMENT TYPE NSF FEE  
ON/OFF FEE RE-READ

Adjustment Number	Customer Name	Account	Route - Meter	Type	Post Date
Description	Service			Amount	
12358	[REDACTED]	20088-00	02-88	BILLING CORRECTION	
ADJUSTMENT	WATER LATE FEE			-44.62	07/25/2023
ADJUSTMENT	SEWER LATE FEE			-48.45	07/25/2023
COMMENTS: Erroneously charged Dale late fees for two months but he has been making payments under his payment agreement.				Subtotal for Account 20088-00 :	-93.07

**Grand Total of Adjustments: -93.07**

Account	Route - Meter Fund - Service	Customer Name	Service Address	Balance	User Type	Past Due
20001-00	03-08	[REDACTED]	302 ELK CREEK ROAD		COMMERCIAL	
	51 - WATER BASE			14868.00		14253.48
	52 - SEWER					
	51 - WATER LATE FEE			10791.95		10791.95
	52 - SEWER LATE FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20001-00 :	25460.75		25045.43
20002-00	02-02	[REDACTED]	305 ELK CREEK ROAD		RESIDENTIAL	
	51 - WATER BASE			254.24		191.84
	51 - WATER USAGE			4.58		2.76
	52 - SEWER			173.05		138.44
	51 - WATER LATE FEE			53.53		34.07
	52 - SEWER LATE FEE			71.20		43.94
	51 - ON/OFF FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20002-00 :	556.60		411.05
20004-00	03-NONE	[REDACTED]	300 ELK CREEK ROAD		RESIDENTIAL	
	51 - WATER BASE			138.44		103.83
	52 - SEWER					
	51 - WATER LATE FEE			739.87		739.87
	52 - SEWER LATE FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20004-00 :	878.31		843.70
20019-00	02-19	[REDACTED]	607 MAIN STREET		RESIDENTIAL	
	51 - WATER BASE			187.20		124.80
	51 - WATER USAGE			30.32		24.51
	52 - SEWER			104.32		69.71
	51 - WATER LATE FEE			13.48		13.48
	52 - SEWER LATE FEE			17.52		17.52
	51 - OVERPAYMENT					
			Subtotal for Account 20019-00 :	352.84		250.02
20028-00	02-28	[REDACTED]	504 MAIN STREET		RESIDENTIAL	
	51 - WATER BASE			187.20		124.80
	51 - WATER USAGE			60.12		47.59
	52 - SEWER			103.83		69.22
	51 - WATER LATE FEE			26.72		7.83
	52 - SEWER LATE FEE			28.38		9.40
	51 - NSF FEE			16.54		16.54
	51 - OVERPAYMENT					
			Subtotal for Account 20028-00 :	431.77		275.38
20043-00	02-43	[REDACTED]	101 MONTGOMERY STREET		RESIDENTIAL	
	51 - WATER BASE			463.33		307.33
	51 - WATER USAGE			38.54		22.14
	52 - SEWER			258.59		173.06
	51 - WATER LATE FEE					
	52 - SEWER LATE FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20043-00 :	761.46		502.53
20054-00	02-54	[REDACTED]	402 MONTGOMERY STREET		RESIDENTIAL	
	51 - WATER BASE			187.20		124.80
	51 - WATER USAGE			4.66		3.92
	52 - SEWER			103.83		69.22
	51 - WATER LATE FEE			12.87		
	52 - SEWER LATE FEE			12.87		
	51 - OVERPAYMENT					
			Subtotal for Account 20054-00 :	321.43		197.94

*Pd. \$610  
7/25/23*

*Agreement*

*Pd. \$250  
7/24/23*

*7-day  
\$4 hr*

*Pd. \$220  
7/25/23*

*Agreement*

*Last pd. \$250  
6/13/23*

*Last pd \$125  
6/13/23*

*Pd in full  
CC*

*New  
Address*

*7-day*

*Last pd. \$1307.48 } 2 payments  
\$1307.48 } on 7/25/23*

*20065  
USDA FOREST SERVICE  
CENTERVILLE RD*

*NEW SUBTOTAL - \$54214.69*

Account	Route - Meter Fund - Service	Customer Name	Service Address	User Type	Balance	Past Due
20066-00	02-68	[REDACTED]	608 MONTGOMERY STREET	RESIDENTIAL		
	51 - WATER BASE				187.20	124.80
	51 - WATER USAGE				3.71	3.44
	52 - SEWER				121.73	87.12
	51 - WATER LATE FEE				27.93	15.11
	52 - SEWER LATE FEE				32.22	16.28
	51 - OVERPAYMENT					
			Subtotal for Account 20066-00 :		372.79	246.73
20071-00	02-71	[REDACTED]	609 MAIN STREET	RESIDENTIAL		
	51 - WATER BASE				157.80	95.40
	51 - WATER USAGE				103.83	69.22
	52 - SEWER				12.48	12.48
	51 - WATER LATE FEE				15.14	15.14
	52 - SEWER LATE FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20071-00 :		289.25	192.24
20077-00	02-77	[REDACTED]	606 MONTGOMERY STREET	RESIDENTIAL		
	51 - WATER BASE				187.20	124.80
	51 - WATER USAGE				114.27	79.66
	52 - SEWER				26.78	14.30
	51 - WATER LATE FEE				30.89	15.44
	52 - SEWER LATE FEE					
	51 - MISC					
	51 - OVERPAYMENT					
			Subtotal for Account 20077-00 :		359.14	234.20
20088-00	02-88	[REDACTED]	101 PLACER STREET	RESIDENTIAL		
	51 - WATER BASE				312.00	249.60
	51 - WATER USAGE				4.92	4.65
	52 - SEWER				184.46	149.85
	51 - WATER LATE FEE				44.62	19.19
	52 - SEWER LATE FEE				48.45	19.19
			Subtotal for Account 20088-00 :		501.98	442.48
20125-00	02-125	[REDACTED]	309 W WALULLA STREET	RESIDENTIAL		
	51 - WATER BASE				249.60	187.20
	51 - WATER USAGE				10.26	7.42
	52 - SEWER				138.44	103.83
	51 - WATER LATE FEE				49.26	29.80
	52 - SEWER LATE FEE				95.75	66.64
	51 - OVERPAYMENT					
			Subtotal for Account 20125-00 :		543.31	394.89
20126-00	02-126	[REDACTED]	316 W WALULLA STREET	RESIDENTIAL		
	51 - WATER BASE				249.60	187.20
	51 - WATER USAGE				138.44	103.83
	52 - SEWER				34.94	34.94
	51 - WATER LATE FEE				44.30	44.30
	52 - SEWER LATE FEE				70.00	
	51 - ON/OFF FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20126-00 :		537.28	370.27
20131-00	02-131	[REDACTED]	116 COTTONWOOD STREET	RESIDENTIAL		
	51 - WATER BASE				187.20	124.80
	51 - WATER USAGE				831.13	831.13
	52 - SEWER				103.83	69.22
	51 - WATER LATE FEE				95.59	
	52 - SEWER LATE FEE				95.59	
	51 - ON/OFF FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20131-00 :		1313.34	1025.15

*Pd. \$200  
7/19/23*

*Last pd \$145  
6/13/23  
PAST DUE*

*Last pd \$250  
6/13/23*

*Pd. \$200  
7/19/23*

*Last pd \$145  
6/13/23  
PAST DUE*

*7/25/23  
Adjusted out late fees  
Agreement  
No has been paying  
P-15 agreement.*

*Last pd. Agreement  
\$109  
6/20/23  
501.98 - 394.45*

*Last Pd. \$200  
6/14/23*

*Last pd  
\$200  
7/11/23*

*Agreement  
w/Joan  
Pelley*

*Pd  
in Full*

*7/18/23*

*7-day sent  
as this is  
a lot.*

Account	Route - Meter Fund - Service	Customer Name	Service Address	Balance	User Type	Past Due
20143-00	02-143	[REDACTED]	201 COMMERCIAL STREET		RESIDENTIAL	
	51 - WATER BASE			187.20		124.80
	51 - WATER USAGE			31.12		24.23
	52 - SEWER			103.83		69.22
	51 - WATER LATE FEE			14.90		
	52 - SEWER LATE FEE			14.90		
	51 - ON/OFF FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20143-00 :	351.95		218.25
20183-00	02-183	[REDACTED]	3841 HIGHWAY 21		RESIDENTIAL	
	51 - WATER BASE			165.98		103.58
	51 - WATER USAGE			57.12		45.37
	52 - SEWER			103.83		69.22
	51 - WATER LATE FEE			22.15		7.25
	52 - SEWER LATE FEE			25.19		8.70
	51 - OVERPAYMENT					
			Subtotal for Account 20183-00 :	374.27		234.12
20235-00	02-235	[REDACTED]	106 MORES CREEK DRIVE		RESIDENTIAL	
	51 - WATER BASE			137.97		75.57
	51 - WATER USAGE			3.91		2.02
	52 - SEWER			103.83		69.22
	51 - WATER LATE FEE			7.76		
	52 - SEWER LATE FEE			7.76		
	51 - MISC					
	51 - OVERPAYMENT					
			Subtotal for Account 20235-00 :	261.23		148.81
20241-00	02-241	[REDACTED]	403 ELK CREEK ROAD		RESIDENTIAL	
	51 - WATER BASE			249.60		187.20
	51 - WATER USAGE			10.33		5.40
	52 - SEWER			138.63		104.02
	51 - WATER LATE FEE			25.77		8.51
	52 - SEWER LATE FEE			27.07		8.51
	51 - OVERPAYMENT					
			Subtotal for Account 20241-00 :	451.40		308.64
20246-00	02-246	[REDACTED]	416 ELK CREEK ROAD		RESIDENTIAL	
	51 - WATER BASE			124.80		62.40
	51 - WATER USAGE			48.67		37.87
	52 - SEWER			75.04		40.43
	51 - WATER LATE FEE			16.76		6.73
	52 - SEWER LATE FEE			18.10		6.73
	51 - OVERPAYMENT					
			Subtotal for Account 20246-00 :	283.37		154.16
20278-00	02-278	[REDACTED]	301 W WALULLA STREET		RESIDENTIAL	
	51 - WATER BASE			187.20		124.80
	51 - WATER USAGE			4.80		3.11
	52 - SEWER			104.19		69.58
	51 - WATER LATE FEE			12.79		
	52 - SEWER LATE FEE			12.79		
	51 - ON/OFF FEE					
	51 - OVERPAYMENT					
			Subtotal for Account 20278-00 :	321.77		197.49
20291-00	02-291	[REDACTED]	204 LAINEY LANE		RESIDENTIAL	
	51 - WATER BASE			561.60		499.20
	52 - SEWER			311.49		276.88
	51 - WATER LATE FEE			193.44		143.52
	52 - SEWER LATE FEE			264.05		181.62
			Subtotal for Account 20291-00 :	1330.58		1101.22

7/12/23  
\$ 218.25

last pd. \$117.60  
5/16/23

5133.10  
351.95

last pd. \$125  
6/13/23

pd in  
fall +

pd \$300  
7/19/23

last pd. \$200  
3/28/23

PAST DUE 1/11/23

last pd \$300  
5/9/23

pd \$250  
7/17/23

7-day



Account	Route - Meter Fund - Service	Customer Name	Service Address	Balance	User Type	Past Due
20293-00	02-293	[REDACTED]	232 MORES CREEK DRIVE		RESIDENTIAL	
	51 - WATER BASE			561.60		499.20
	52 - SEWER			311.49		276.88
	51 - WATER LATE FEE			193.44		143.52
	52 - SEWER LATE FEE			284.05		181.62
			Subtotal for Account 20293-00 :	1330.58		1101.22
30002-00	03-02	[REDACTED]	304 ELK CREEK ROAD		RESIDENTIAL	
	51 - WATER BASE					
	52 - SEWER			138.44		103.83
	51 - WATER LATE FEE					
	52 - SEWER LATE FEE			739.87		739.87
	51 - OVERPAYMENT					
			Subtotal for Account 30002-00 :	878.31		843.70
				<b>Total Balance:</b>		<b>38356.18</b>
				<b>Total Past Due:</b>		<b>34738.62</b>

*Pa. \$220  
7/25/23*

*Agreement*



ate: Jul 10, 2023 6:39:06PM

Attention: Water Department

Contact Name: Steven Green

Email: [REDACTED]

Phone: [REDACTED]

Subject: late payment fees and usage charges

Comments:

To the council, i want to before the council and state an issue with my bill, i have lived here now for 5+ years and have never had a late fee on my bill and when I saw it I was quite upset. by payment this month was late due to an issue with my bank, I\'m not sure what happened but i scheduled the payment as always with DLEvans and for some reason it didn\'t go through and there is not a record of a schedule or pending payment. when I realized it didn\'t come out, I came over and paid it, yes it was late but not because of an oversight or just blowing it off. I would request it to be waved this time and if that\'s not possible I need to appear before the council and address it. I am not disputing the usage charge how ever I have been charged several time for usage and it was minimal but like this month my usage was 600 gallons never that i\'m aware of, have i ever went over a thousand gallons. the last bill showed 1.08 usage over and I believe I asked about it last time I saw it, and was told either meter wasn\'t read or possible averaging. now this isn\'t a great concern to me but anything out of the ordinary raises flags, do I have a leak, is the a problem with the meter leaking, that sort of thing. I appreciate your assistance in the matter. Steven Green