The template begins on the next page.

<Highlighted text is either general information or are suggestions that need to be modified to reflect system-specific conditions or information or deleted if they do not apply>
TITLE PAGE

DRINKING WATER DISTRIBUTION SYSTEM
SAMPLING PLAN (DSSP) FOR:

WATER SYSTEM NAME
PWS # NM35-XXX-XX

Address City Zip
Phone Email
County

Original Plan Prepared By Name & Title
Preparer’s Contact Info
Date Prepared
Date Submitted to NMED DWB
Signature

Reviewed by DWB SWIG Tech Services Coordinator Name
Date Recommended for Approval
Signature
## INITIAL DSSP SECTION APPROVALS

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<td>Compliance Officer Signature: __________________________</td>
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REVISION TRACKING

Original Plan Prepared By
Date Prepared

1st Revision By
1st Revision Date
Date Submitted to NMED
Date Approved by NMED

2nd Revision By
2nd Revision Date
Date Submitted to NMED
Date Approved by NMED
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- RTCR Routine Sample Sites
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Appendix F Guidelines for Lead and Copper Site Selection and Sampling
Suggested Directions to Homeowners for Sample Collection
Section 1: System Description and Contact Information
The <Water System> owns and operates one groundwater well. The water system serves 125 people with 70 connections. Water from the well is disinfected with a 6% hypochlorite solution prior to being pumped to a 10,000 gallon ground storage tank. Water from the tank gravity flows to our distribution system.

Our current sample schedule from Drinking Water Watch is provided in Appendix A.

| Administrative Contact: | name  
|                         | Address city state zip  
|                         | Phone(s)  
|                         | email  

| Certified Operator: | name  
|                   | Address city state zip  
|                   | Phone(s)  
|                   | email  

| NMED-DWB Contact | Compliance Officer (CO) name  
|                 | Address city state zip  
|                 | Phone(s)  
|                 | email  

Example System Schematic

[Diagram of water system including well, 10,000 gallon storage tank, distribution system, chlorine injection, raw water sampling port, entry point sample port]
Section 2: Bacteriological Sampling

Revised Total Coliform Rule (RTCR) Sampling

Frequency

Based on our population of X and the sample requirements provided in Tables 1 and 2 of the instructions, we are required to designate a minimum of Y routine sample locations per month and collect a minimum of Z routine bacteriological samples per month.

Location

We are required to identify each of our routine monthly bacteriological sample locations, and the three (3) repeat sites (original, up- and downstream) associated with each routine site with either a physical address or physical location. Those addresses/physical locations are listed on the RTCR Sample Site spreadsheet in Appendix B. That spreadsheet has been submitted to the DWB according to the instructions that accompanied the spreadsheet; the submittal acknowledgement is included in Appendix B.

Appendix C includes the map(s) showing where these routine and repeat sites are located throughout our distribution system.

We understand that the DWB will be verifying that we sample from each routine and repeat sample location designated on our DSSP. We further understand that our DWB Compliance Officer will also verify that we collect the routine samples at regular intervals from month to month (i.e., same week each month) and that we are rotating through each major and minor portion of the distribution system.

Alternate Repeat Sampling Locations

The RTCR Sample Site Spreadsheet in Appendix B designates repeat sample locations that are within the five (5) connections up- and downstream of the original routine sample location. However, we understand that we can use alternate up- or downstream repeat sampling locations that are outside the five (5) connections from the original sample site as long as we submit a Standard Operating Procedure (SOP) that specifies our criteria for selecting these alternate repeat sampling sites on a situational basis (i.e., for any time we are required to collect repeat distribution system samples and determine that the prescribed repeat locations do not adequately identify potential pathways of contamination).

We do not plan to use any alternate repeat sampling sites. OR

We do plan to use alternate repeat sampling sites, and our SOP is provided in Appendix D. The SOP has been designed to focus the repeat samples at
locations that best verify and determine the extent of potential contamination of the distribution system area based on specific situations; however, we understand that the DWB may modify the SOP or require other alternate monitoring locations as needed.

**Seasonal Systems**
Seasonal systems are systems that start up and shut down at the beginning and end of a specific operating season and may depressurize all or part of the water system at some point during the year.

**We are not a seasonal system. OR**

**We are a seasonal system**, and as such, we are required to follow the DWB Seasonal System Start-up Procedure and submit our Seasonal Start-up Procedure Checklist to our CO at least 10 days prior to opening. The start-up procedure will require us to collect one or more Special bacteriological samples to verify water quality.

Special samples will be taken at the X sites listed in the table below which identifies the physical address or location of the Special sample and the system feature (i.e., storage tank, distribution system) the sample is associated with along with the Special sample number. These sites were chosen based on the requirements established in the seasonal start-up guidance provided by the DWB. They are also designated on the distribution system map(s) in Appendix C. We further understand that Special samples are samples collected and paid for by the water system.

<insert table here>

**Groundwater Rule (GWR) Sampling**
One (1) Triggered Source Water sample is required to be collected from every active well if any of our routine monthly samples test positive for Total Coliform (TC) or *E.Coli* (EC). These Triggered Source Water Samples will be collected directly from each of our wells prior to any treatment and are shown on the map(s) in Appendix C. Our sample points are labeled as “Raw Water” as shown in the photograph below.

<insert photo here>
Sampling Requirements
New Mexico Regulations require that a certified sampler or certified operator collect the RTCR and GWR samples. Because of this requirement, our certified <sampler/operator> will be required to collect our bacteriological samples. Once collected, our <sampler/operator> will submit the samples and their Chain-of-Custody (CoC) forms to the following certified laboratory within 24 hours of the sample being collected:

laboratory name
address
city state zip
phone(s)

Compliance Status
RTCR
Our water system triggers an assessment with the RTCR if:

- We get 2 or more TC+ samples in any one (1) month (for systems that take <40 samples/month);
- >5% of our routine samples are TC+ (for systems that take 40 or more samples/month);
- We fail to take all the required repeat samples
- Any one (1) of these conditions will trigger a required Level 1 assessment/correction action

A Level 2 assessment/corrective action is triggered if we get:

- An EC Maximum Contaminant Level (MCL) violation; or
- An EC monitoring violation; or
- We trigger two (2) Level 1 assessments within a rolling 12 month period
GWR
We are in compliance with the GWR if our Triggered Source Water sample(s) are free of EC.

We will immediately notify our DWB CO if any of our Triggered Source Water samples test positive for TC or EC. At that time, we can be required to conduct additional sampling, correct significant deficiencies, or disinfect our water to meet 4-log treatment requirements.

Section 3: Disinfectant Residual Monitoring
Frequency
We do not add chlorine to our water, and as such we are not required to monitor chlorine residual. OR

We are a chlorinated system, and as such we are required to measure chlorine residuals at the same time we collect our monthly routine RTCR samples. We also measure chlorine residuals throughout the month as part of our best management practices.

Based on our population of \( X \) and the requirements provided in Tables 1 and 2 of the DSSP template instructions, we are required to designate a minimum of \( Y \) chlorine residual monitoring locations per month.

Location
Chlorine residuals are measured at the same time and from the same locations where we collect our routine monthly RTCR samples. Results are recorded on each bacteriological CoC form and submitted to the lab with those samples. The sites were chosen based on the fact that they are representative of the entire distribution system, and are designated on the map(s) included in Appendix C.

We also measure chlorine residuals at the \( Y \) chlorine residual monitoring sites throughout the month as part of our best management practices. This is to ensure that injection dosages are sufficient to meet chlorine demand and maintain adequate residuals in the entire distribution system, including vulnerable portions of the system. Vulnerable areas are anywhere we might have increased water age or stagnant water (storage tanks, high elevation/low pressure, low occupancy, dead ends). We use these chlorine residual results along with other information to focus our best management practices such as line and hydrant flushing (along with valve exercising).
Methodology and Reporting
Our certified <operator/sampler> uses a <specify equipment here> to measure chlorine residuals and follows all sample collection, handling, measuring and equipment calibration protocol specified in the operation manual.

All chlorine residuals that are measured during RTCR routine and repeat sampling and for best management practices. These results are required to be recorded on the bacteriological chain of custody forms that are submitted to the lab and are also recorded on the Residual Disinfectant Residual Measurement Sampling Report (Appendix E). We submit this report to our DWB CO by the 10th day following each quarter, as required.

Compliance
Our water system is in compliance if:

- We maintain chlorine residuals less than or equal to 4.0 mg/L, the Maximum Residual Disinfectant Limit (MRDL)
- We submit our Residual Disinfectant Residual Measurement Sampling Report to our DWB CO no later than the 10th day following each quarter

Section 4: Lead and Copper Rule (LCR) Sampling

Frequency
We are required to collect five (5) Lead and Copper samples once every three (3) years. We use Drinking Water Watch to keep track of this sampling schedule (Appendix A).

Location
Sample locations are based on the age and types of structures we have in our community, including schools. We have included guidelines for site selection and sampling in Appendix F of this plan. Based on these criteria we have selected the main and alternate locations designated in the following table for every Lead and Copper sampling event. These locations are also designated on the map(s) in Appendix C.

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>246 Even Parkway</td>
</tr>
<tr>
<td>2</td>
<td>135 Odd Street</td>
</tr>
<tr>
<td>3</td>
<td>888 Water Way</td>
</tr>
<tr>
<td>4</td>
<td>753 Turkey Road</td>
</tr>
<tr>
<td>5</td>
<td>525 Marquez St</td>
</tr>
<tr>
<td>&lt;6&gt;</td>
<td>&lt;add more rows for additional&gt;</td>
</tr>
</tbody>
</table>
Methodology
Sampling protocol requires that these samples are:
- Point-of-Use (POU) collected directly from the customer’s tap
- Collected as a “first draw” sample before any other usage takes place at the sampling tap (no flushing of faucet or lines before collection)
- 6 to 18 hours old in customer’s plumbing
- Typically collected by occupant of sampling location
- Typically collected during third quarter warm weather months July to September

In order to meet these sampling protocol our certified sampler/operator will obtain appropriate sample containers and CoC forms, deliver containers and forms to sample location occupants and provide instruction for sample collection (also included in Appendix F), arrange for sample pick-up after sampling, complete CoC forms, and submit samples to the following appropriate certified laboratory:

<table>
<thead>
<tr>
<th>laboratory name</th>
<th>address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>city state zip</td>
</tr>
<tr>
<td></td>
<td>phone(s)</td>
</tr>
</tbody>
</table>

Compliance
Our water system is in compliance if we collect our Lead and Copper samples according to schedule and the sample results are below the 90th Percentile Action Level for each contaminant (Copper=1.3 mg/L, Lead=0.015 mg/L). We will notify our DWB CO of any violations; the DWB may require additional sampling.
Section 5: Disinfectants/Disinfection By-Products (D/DBP) Rule Sampling

Frequency and Location
Stage 2 Disinfectants/Disinfection By-Products Rule (S2D/DBPR) sampling requirements are based on system size (population served) and type (CWS/NTNC, GW/SW). Since we are a <GW/SW> system that serves a population of X people we are required to collect # Total Trihalomethane (TTHM) samples and # Haloacetic Acid (HAA5) samples <annually/quarterly> from our distribution system. We use Drinking Water Watch to keep track of this sampling schedule (Appendix A).

Specifically, we have been instructed by the DWB to collect our DBP samples as follows:

<choose one>:
Certain GW or SW systems serving less than 500 population:
Facility ID #xxxxx000, Sample Point ID #DBP-DIST Dual
[Collect one TTHM AND one HAA5 sample per year from same site]

OR
Other GW or SW systems serving less than 500 population:
Facility ID #xxxxx000, Sample Point ID #TTHM-IND
[Collect one TTHM sample per year at one site]
Facility ID #xxxxx000, Sample Point ID #HAA5-IND
[Collect one HAA5 sample per year at another site]

OR
GW systems serving 500-9999 population:
Facility ID #xxxxx000, Sample Point ID #TTHM-1 Dual and #HAA5-1 Dual
[Collect one TTHM sample AND one HAA5 sample per year at two (2) different sites]

OR
SW systems serving 500-3300 population:
Facility ID #xxxxx000, Sample Point ID #TTHM-IND
[Collect one (1) TTHM sample per quarter at one site]
Facility ID #xxxxx000, Sample Point ID #HAA5-IND
[Collect one (1) HAA5 sample per quarter at another site]

OR
SW systems serving 3301-9999 population:
Facility ID #xxxxx000, Sample Point ID #TTHM-1 Dual and #HAA5-1 Dual
[Collect one TTHM sample AND one HAA5 sample per quarter at two (2) different sites]

OR
All other GW and SW systems serving 10,000 population or greater:
[Collect anywhere from 4 to 20 Dual TTHM and HAA5 samples per quarter; both TTHM and HAA5 samples are collected at the same time and location quarterly]
Our S2D/DBP sample locations are designated on the map(s) in Appendix C.

Sampling Method
The chemicals that comprise the total trihalomethanes (TTHMs) are considered volatile; they would rather be in the vapor or gas phase than in the aqueous phase. This requires special consideration when collecting these samples. Our certified <sampler/operator> will collect the TTHM samples without any “headspace” or air in the vial using the following techniques:

- Open the tap and allow the water to flow for 5 minutes
- Adjust the flow to about 500 mL (1 pint) per minute
  - Any aerator device on faucet must be removed
- Take twin 40-mL vials out their original plastic baggies
- Open one vial
- Slowly fill the vial to the very top so that the water surface bows up and above the rim of the vial
- Re-cap the vial
- Invert the capped vial to make sure no headspace or bubbles are present
- If headspace is present then remove cap and carefully add a little more water from the tap and re-cap again
- Fill the second duplicate vial in the same manner
- Complete all lab CoC forms and labels
- Place the two vials back into their original bag

HAA5 vials can be filled with headspace since the chemical is not volatile.

Samples will be submitted to the following appropriate certified laboratory:

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<tr>
<th>laboratory name</th>
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</thead>
<tbody>
<tr>
<td>address</td>
</tr>
<tr>
<td>city state zip</td>
</tr>
<tr>
<td>phone(s)</td>
</tr>
</tbody>
</table>

Compliance
Our water system is in compliance if we meet the required sampling schedule and the locational running annual average (LRAA) is less than the MCL for each D/DBP (TTHM=80ug/L, HAA5=60ug/L). We are required to, and will notify our DWB CO of any violations.
Section 6:  Entry Point (EP) Chemical Compliance Sampling for Organics, Inorganics & Radiologicals

Frequency
Chemical samples are collected at a time frame and frequency that is established by the DWB. We keep track of our sampling schedules (Appendix A) for all SDWA primary drinking water contaminants using the DWB Drinking Water Watch website.

Location
These chemical compliance samples are required to be taken at the Entry Point (EP) to the distribution system, regulatorily defined as where potable water is first made available to our customers. Our EP sample point is a frost free hydrant that is located on the downstream side of our storage tank as shown in the following photograph:

<insert photo here>

Sampling Method
We are subject to Conservation Fund payments to NM Taxation and Revenue at a rate of $0.03 per thousand gallons produced per month, and as such DWB staff samplers collect our EP chemical compliance samples. They are responsible for arranging a visit with us for access to the EP, properly collecting the samples, filling out CoC forms and submitting the samples to an appropriate certified laboratory for analysis. However, we do understand that we are ultimately responsible for the collection of these samples. If the DWB staff sampler has not arranged for their collection within one (1) month of their due date we will either contact the DWB to remind them that the sample(s) must be collected or we will arrange for a certified sampler or operator to collect the samples and submit them to a certified laboratory.
We are a <federal/Tribal> facility and NOT subject to Conservation Fund payments. Consequently, we are responsible for our own EP chemical compliance sampling according to the DWB sample schedule (Appendix A). Our certified <sampler/operator> collects our EP chemical compliance samples and submits the samples and completed CoC forms to the following appropriate certified laboratory(s) for analysis:

<table>
<thead>
<tr>
<th>laboratory name(s)</th>
<th>address</th>
<th>city state zip</th>
<th>phone(s)</th>
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</table>

Compliance
Our water system is in compliance if the EP chemical compliance samples are collected according to schedule and chemical concentrations meet all the MCL requirements set forth by the SDWA primary drinking water standards. We are required to, and will notify our DWB CO of any violations and follow all Public Notification Rule and other regulatory requirements in the event of any MCL, sampling or reporting violations.

Section 7: Distribution System Asbestos Sampling

Frequency
We have reviewed our sample schedule on Drinking Water Watch (included in Appendix A) and verified that we are <not> required to sample our distribution system for asbestos.

Location (if applicable)
Refer to the map(s) in Appendix C for asbestos sample locations.

Sampling Method (if applicable)
Our certified <sampler/operator> will obtain appropriate sample containers and CoC forms, collect the sample(s), complete CoC forms, and submit samples to the following appropriate certified laboratory:

<table>
<thead>
<tr>
<th>laboratory name</th>
<th>address</th>
<th>city state zip</th>
<th>phone(s)</th>
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</table>

Compliance (if applicable)
Our water system is in compliance if we meet the required sampling schedule and the sample results meet the asbestos MCL of 7,000,000 fibers/L. We are required to, and will notify our DWB CO of any violations.
APPENDIX A

System Sample Schedule from Drinking Water Watch
APPENDIX B

RTCR Sample Sites Spreadsheet

Spreadsheet Submittal Acknowledgement Form
Appendix C

Map(s) of Distribution System Showing:
- RTCR Routine Sample Sites
- RTCR Repeat Sample Sites
- RTCR Seasonal Start-Up Special Sample Sites (if a seasonal system)
- GWR Triggered Source Sampling Sites
- Chlorine Residual Monitor Sites (if a chlorinated system)
- Lead and Copper Sample Sites (if required)
- D/DBP Sample Sites (if a chlorinated system)
- Asbestos (if required)
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Alternate RTCR Repeat Sampling Sites SOP
APPENDIX E

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APPENDIX F

Guidelines for Lead and Copper Site Selection and Sampling

Suggested Directions to Homeowners for Sample Collection