

*Metro Vision 2020 Clean Water Plan:*

**Wastewater Utility Plan  
2003 Guidance**

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**Water and Environmental Planning Committee  
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## ABSTRACT

<b>TITLE</b>	<i>Metro Vision 2020 Clean Water Plan: Wastewater Utility Plan 2003 Guidance</i>
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<b>ABSTRACT</b>	<p>This guidance document provides necessary information, direction and process to utility departments, consultants, planners or wastewater managers that need to produce or update a wastewater utility plan. The guidance document details requirements and general modifications that apply for wastewater works and facilities. Wastewater service areas and future planning areas form the linkage with the <i>Metro Vision Plan</i> process. All permitted wastewater treatment facilities in the nine-county metropolitan region are expected to complete a utility plan for regional site approval. All wastewater utility plans require periodic updating not to exceed a five-year cycle. Only accepted or conditionally accepted utility plans will be used to process state site approvals within the DRCOG region.</p>

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## EXECUTIVE SUMMARY

Wastewater utility plans meet multiple wastewater management documentation needs and serve as the technical appendices for the *Metro Vision 2020 Clean Water Plan*. Utility plans are critical in determining how wastewater service is provided to urban areas and for special case locations that have a permitted wastewater treatment facility. The long-term goal is to have a wastewater utility plan for all permitted wastewater treatment systems (plants and works) in the DRCOG 9-county region by January 1, 2003. Established utility plans are reviewed and updated, as appropriate, every five years.

The policy direction for wastewater utility plans is contained in the Denver Regional Council of Governments' (DRCOG) *Metro Vision 2020 Clean Water Plan*. This guidance document provides detailed technical information specifically targeting utility departments, consultants, planners or wastewater managers that need to produce a wastewater utility plan. Utility plans must be consistent with the policy direction contained in the *Metro Vision 2020 Clean Water Plan*. Utility plans apply to wastewater treatment plants and all associated wastewater works as defined in the *state site approval regulation number 22* (Appendix A).

This technical guidance document details types of wastewater utility plans and reports, dischargers or wastewater providers who need to complete a utility plan, the role of the water quality management agency, timing schedules and documentation requirements. A number of steps in this process are outlined that increase the effectiveness and efficiency of wastewater management planning within the DRCOG region. The process is reviewed by the Water and Environmental Planning Committee and updated as appropriate.

Important definitions are provided early in the guidance document since these definitions are critical in understanding the guidance recommendations. The definitions are consistent with definitions contained in the Colorado site approval process and the *Metro Vision Plan*. The site approval regulation should be referenced for additional definitions.

The *Clean Water Plan* identifies and maps two types of wastewater service areas that are termed *Wastewater Utility Service Area (WUSA)* and *CWP Planning Area*. These service area concepts provide the necessary linkage with the *Metro Vision Plan* process. Each wastewater utility plan will identify specific service areas and describe how these areas will be served in context with meeting water quality standards. WUSAs must be consistent with the urban growth boundary/area designated through the *Metro Vision Plan* process.

Long-range wastewater service areas are called CWP planning areas. The portion of the CWP planning area beyond the urban growth boundary/area is based on approved local comprehensive plans, comprehensive long-range utility plans or the area a wastewater provider intends to serve at ultimate development, which has been officially

adopted in planning documents. CWP planning areas can extend significantly beyond the 2020-planning horizon. In most cases, the CWP planning area may more closely represent the total amount of urban area needed for a projected 2040 population or the ultimate build-out of a utility service area.

The urban growth boundary/area can be modified through flexibility provisions adopted as part of the *Metro Vision Plan*. Wastewater providers must work with local planners to adjust the *Metro Vision Plan* urban growth boundary/area/area and subsequently the utility service areas through the flexibility provision process. Once an urban growth boundary/area/area change is made, the *Clean Water Plan* policy does allow automatic adjustment of the corresponding wastewater utility service areas without a separate amendment process.

Utility plans must meet the requirements of the Colorado Department of Public Health and Environment site approval regulation number 22. As part of the state Water Quality Act, site approvals are needed for construction or expansion of wastewater treatment works, lift stations, and major interceptor lines. The definitions used in the site approval regulation are also the same defined terms that should be used in utility planning. Utility plans that have been *accepted* or *conditionally accepted* by the Water and Environmental Planning Committee and DRCOG are used in the site approval process.

Utility plans document the wastewater management strategy for a wastewater treatment facility (greater than 2000 gallons per day capacity) and the associated service and planning areas. All utility plans will contain a defined set of minimum information (location, sizing, staging, service area, process system, effluent quality and financial arrangements). The appropriate checklists should be followed in the preparation of a new utility plan.

The primary goals in establishing wastewater utility plans are to provide reasonable, feasible and economical wastewater service to an area designated for development within the 9-county DRCOG region. Utility plans should consider the water quality impact the treatment system will have on receiving waters. The utility plan should include any strategy for meeting all applicable water quality standards and classifications, while quantifying the potential impact a discharger may have on other dischargers where TMDLs exist or are likely to exist. A coordinated watershed approach is the preferred method.

The DRCOG Water and Environmental Planning Committee may periodically request confirmation of utility plan recommendations from the regional council's Board of Directors. Accepted and conditionally accepted utility plans will be referenced in the *Clean Water Plan* and function as the technical appendices to the plan. Consequently, these plans will represent the preferred wastewater management strategy for the wastewater utility service area and the CWP planning area. Accepted and conditionally accepted utility plans will be used in the site approval process and to meet other appropriate regulatory requirements.

## I. FREQUENT QUESTIONS

### What is a wastewater utility plan?

The wastewater utility plans meet four wastewater management documentation needs, including, but not limited to the following five basic functions:

1. The primary support document to amend the *Metro Vision 2020 Clean Water Plan* and serve as the technical appendices to the plan.
2. Links wastewater utility planning with the *Metro Vision Plan* and any subsequent regional plans adopted by the DRCOG Board of Directors. Consequently, an accepted wastewater utility plan is tool for implementation of the *Metro Vision Plan*.
3. The primary support document for a site approval application.
4. A support document to provide necessary background and planning information needed by the Water Quality Control Division in the discharge permitting process.
5. A support document for a revolving loan fund application.

**Rule 1 – Wastewater Utility Plans are 20-year planning documents**

### Who needs to complete wastewater utility plans?

All wastewater providers within the DRCOG 9-county region with 1) treatment facilities or plants permitted to discharge greater than 2000 gallons per day, as issued through the Colorado Discharge Permit System (CDPS), and 2) selected cities or special districts with wastewater collection systems that use a separate contract treatment provider.

**Rule 2 - If you ever need to process a site approval or have or need a wastewater discharge permit, then you need a wastewater utility plan.**

### When will wastewater utility plans be needed?

All wastewater providers within the DRCOG region need to complete a wastewater utility plan for site approval on an as needed basis.

### Is there a renewal cycle for accepted utility plans?

Utility plans are dynamic documents that can be amended on an as needed basis and require periodic (maximum 5-years between review actions) review and renewal. For existing wastewater providers, the development and review of utility plans is linked to

the five-year permit renewal cycle.

### **Adopted Changes To Metro Vision 2020 Clean Water Plan**

Wastewater utility plans meeting minimum recommendations contained in the *Clean Water Plan* will be available for *wastewater utility service areas* and associated planning areas. *Clean Water Plan* amendments, site application approvals and other approvals under the *Clean Water Plan* will necessitate an accepted wastewater utility plan. Wastewater utility service area forecasts will be maintained consistent with all Metro Vision Plan forecasts and policies. The council will maintain a reference set of accepted utility plans developed by management agencies or operating agencies for all permitted wastewater treatment facilities with an active discharge permit, as appropriate.

The Water and Environmental Planning Committee will process wastewater utility plans when submitted and as needed to support site approval applications. Wastewater utility plans must meet minimum recommendations contained in the *Clean Water Plan* for WUSA and associated planning areas. Wastewater utility service area forecasts will be maintained consistent with all Metro Vision Plan forecasts and policies. Utility plans for minor WUSA may be approved if sufficient planning is completed to show that there will not be negative water quality effects of any proposed new facility or facility expansion.

*Clean Water Plan* amendments, site approvals and other approvals under the *Clean Water Plan* will require **an accepted** wastewater utility plan.

### **Are other treatment work reports needed?**

Other treatment works requiring the utility review and acceptance process include lift station, collection systems, interceptors, cluster systems, non-growth areas and certain service area adjustments associated with conformity with the *Metro Vision Plan*. Special reports for lift stations and collection or interceptor systems are listed in the guidance document.

Some minor wastewater providers will not complete a utility plan within this time frame. Additionally, some collection system providers may not complete utility plans. If there is no reason to change the treatment plant capacity, modify the service area or upgrade the treatment works; a utility plan may not be necessary. However, any changes to the treatment works or service area for these minor systems will require a final utility plan, subject to the *Metro Vision Integration Process*.

### **What information is contained in this guidance document?**

**Wastewater Utility Plans  
replace 201 facility plans.**

This guidance document provides the necessary information and direction to utility departments, consultants, planners or wastewater managers that need to produce a wastewater utility plan. Utility plans must be consistent with the policy direction contained in the *Metro Vision 2020 Clean Water Plan* (DRCOG 1998). Wastewater utility plans, as established in the *Clean Water Plan (CWP)*, replace previous 201 facility plans.

It is recognized that the amount of detail will vary between utility plans, depending on facility complexity and size. The Colorado Department of Public Health and Environment, Water Quality Control Division may require some additional support documentation in the site approval, permitting and loan processes.

**The long-term goal is to have an accepted utility plan for all permitted  
wastewater treatment facilities in the nine-county DRCOG planning region.**

Utility plans are critical in determining how wastewater service is provided in the region. This includes urbanized areas, as well as, small locales requiring centralized services or specialized sites requiring a wastewater treatment plant with a capacity greater than 2,000 gallons/day (e.g., church camp, truck stop, and restaurant). The utility plan level of detail will be kept flexible to accommodate all wastewater providers.

**What is the review and acceptance process?**

**Rule 3 - WEPC is empowered by the DRCOG Board to accept utility plans.**

The review and acceptance of wastewater utility plans, associated with designated service areas, is a responsibility of the DRCOG Water and Environmental Planning Committee (WEPC) at the discretion of the Board of Directors. Utility plans may be accepted by WEPC at any regularly scheduled advisory committee meeting.

The role of the DRCOG Board of Directors is to assure that the policy directions contained in the *Metro Vision 2020 Clean Water Plan* (DRCOG 1998) are incorporated into the accepted utility plans. Copies of the *Metro Vision 2020 Clean Water Plan* are available on the DRCOG web site at [www.drcog.com](http://www.drcog.com). The policy directions were developed in cooperation with the Water Quality Control Division. While the division uses utility plans as source information in its various processes, the acceptance by WEPC does not preclude the division from requiring additional documentation.

**Document format**

Wastewater utility plans should be completed as electronic files whenever possible. The format can be either word or PDF. Some large maps may be submitted in hard copy format. Electronic submittals should also have a hard copy executive summary for review purposes only. The Water Quality Control Division requires a complete

document in hard copy form. DRCOG can store a utility plan in electronic form. Large utility plans should not be bound in 3-ring notebooks.

## II. METRO VISION PLAN LINKAGE

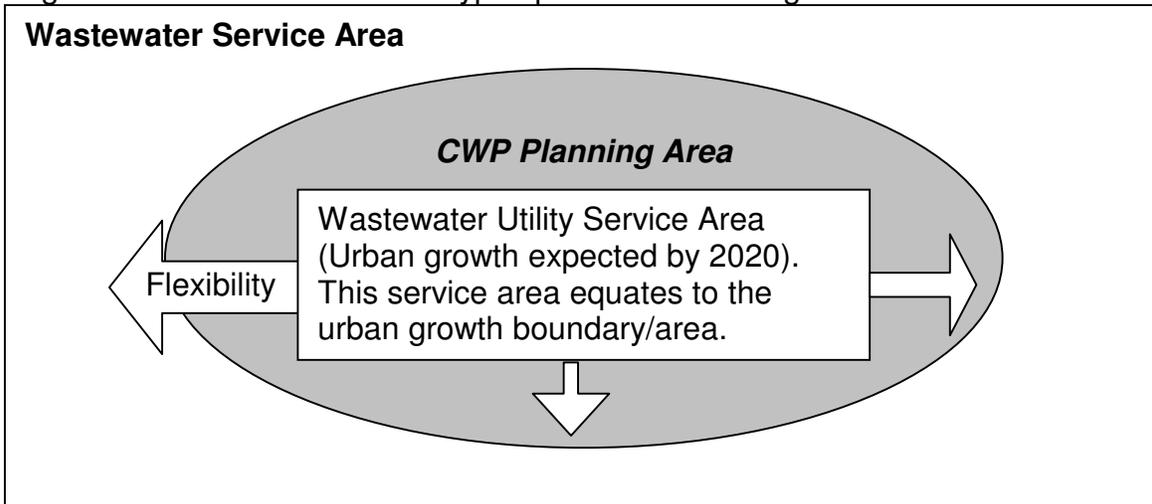
Defining the extent of urban development (urban growth boundary/area) is a local planning function, reflected in the *Metro Vision Plan* (DRCOG 1997). The *Metro Vision Plan* is the Denver region's long-range land use plan for addressing the future growth of the nine-county metropolitan region. Expected urban development should occur within an area of about 750-square-miles by 2020. The plan outlines strategies and implementation steps to preserve the region's quality of life while also positioning the region to benefit from growth. The *Clean Water Plan* is one of the six core elements of the *Metro Vision Plan* and defines the provision of wastewater service within the urban growth boundary/area.

**The *Clean Water Plan* is a core element of the *Metro Vision Plan*.**

### Geographic context

The *Clean Water Plan* defines how wastewater service and water quality attainment can be achieved within specific geographies. The *Clean Water Plan* (DRCOG 1998) identifies and maps two types of wastewater service areas termed *Wastewater Utility Service Area (WUSA)* and *CWP Planning Area*. Entities developing utility plans must use the *WUSA and CWP Planning Area* concepts. Recognition of these service area types provides the linkage with the *Metro Vision Plan*

**Wastewater service areas = wastewater utility service areas (WUSA) and CWP Planning Areas. WUSAs are included within the urban growth boundary/area. CWP Planning Areas need urban services after the**



(DRCOG 1997). Each wastewater utility plan will identify a specific service area and describe how this area will be served in context with meeting all required water quality limits. Wastewater service areas, whether they are major or minor wastewater providers, must include the area requiring *urban area* services through the planning

horizon of 2020 or any subsequent planning horizon established by the *Metro Vision Plan* (DRCOG 1997) process.

**Rule 4 - Modifying the *Metro Vision Plan* urban growth boundary/area is a local planning responsibility.**

Areas that may require urban services beyond the 20-year planning horizon are mapped as *CWP planning areas*. These areas include locally approved comprehensive plans or other similarly approved local plans. CWP planning areas can be converted to WUSA through a set of flexibility provisions established under the *Metro Vision Plan* process. The conversion of CWP planning area to WUSA cannot be done through the *Clean Water Plan* or by simple inclusion in a final wastewater utility plan. This conversion must be done through local planning processes.

### **III. ROLE OF MANAGEMENT AGENCIES**

Management agencies and associated operating agencies, in addition to being responsible for implementing aspects of the *Clean Water Plan*, decide on the need for and specific characteristics of wastewater treatment processes and the details of implementation within specified parameters (in accordance with sections 208(b)(2)(D) and 303(e)(3)(E) of the Federal Clean Water Act). Generally, wastewater treatment facility operating agencies have primary responsibility for developing utility plans. Management agencies are responsible for review and approval of utility plans developed by associated operating agencies. When the management agency and operating agency are the same, the utility plan is considered as being developed by the management agency.

Management agencies may be individual municipal governments, watershed associations and authorities, general-purpose governments holding a National Permit Discharge Elimination System (NPDES) discharge permit or other special districts responsible for planning and approving permitted facilities. The governor as recommended by the planning and regulatory agencies designates management agencies. The designated water quality management agencies currently recognized in the *Metro Vision Plan* are listed in Table 1 by watershed.

**Table 1 Designated regional management agencies for utility planning**

<b>Designated Regional Management Agencies</b>	
□	Bear Creek Watershed
	√ Bear Creek Watershed Association (point and nonpoint)
	√ Jefferson County (stormwater)
□	Big Dry Creek Watershed
	√ Big Dry Creek Watershed Association (point and nonpoint)
	√ Broomfield (point and nonpoint)
	√ Northglenn (point and nonpoint)
	√ Westminster (point and nonpoint)
	√ Adams, Boulder, Jefferson and Weld counties (point, nonpoint, and stormwater)
□	St. Vrain & Boulder Watershed
	√ Boulder (point and nonpoint)
	√ Erie (point and nonpoint)
	√ Longmont (point and nonpoint)
	√ Lafayette (point and nonpoint)
	√ Louisville (point and nonpoint)
	√ Lyons (point and nonpoint)
	√ Nederland (point and nonpoint)
	√ Superior (point and nonpoint)
	√ Boulder County (point and nonpoint)
□	Box Elder and eastern plains watersheds
	√ Aurora (municipal point source joint with Metro Wastewater Reclamation District)
	√ Aurora (nonpoint source and stormwater)
	√ Bennett (point and nonpoint)
	√ Deer Trail (point and nonpoint)
	√ Lochbuie (Weld County point and nonpoint)
	√ Adams and Arapahoe counties (point, nonpoint, and stormwater)
□	Chatfield Watershed
	√ Chatfield Watershed Authority (point and nonpoint)
	√ Douglas and Jefferson counties (stormwater)
□	Cherry Creek Watershed
	√ Cherry Creek Basin Authority (point, nonpoint, and stormwater)
□	South Platte Urban Watershed
	√ Adams County Water Quality Association (point)
	√ Aurora (point, nonpoint, and stormwater permit)
	√ Golden/Coors (point)
	√ Golden (nonpoint)
	√ Glendale (point and nonpoint)
	√ Littleton/Englewood (point)

### Designated Regional Management Agencies

- √ Littleton (nonpoint)
- √ Englewood (nonpoint)
- √ Metropolitan Wastewater Reclamation District (point)
- √ Centennial Water and Sanitation District (point)
- √ City & County of Denver (nonpoint and stormwater permit)
- √ Lakewood (nonpoint and stormwater permit)
- √ Arvada, Bowmar, Cherry Creek Village, Columbine Valley, Edgewater, Federal Heights, Greenwood Village, Thornton and Wheat Ridge or any other city or town within the watershed (nonpoint)
- √ Adams, Arapahoe, Denver, Douglas and Jefferson counties (stormwater, stormwater permit, point and nonpoint)
- Upper Clear Creek Watershed
  - √ Upper Clear Creek Watershed Association (point and nonpoint)
  - √ Clear Creek, Jefferson and Gilpin Counties (stormwater)
- Upper South Platte River Watershed
  - √ Upper South Platte River Protection Association (anticipated point and nonpoint, not designated yet)
  - √ Douglas, Jefferson, Park, Teller counties (nonpoint, point and stormwater)

#### IV. FIRST STEPS TO START A UTILITY PLAN

Recommended first steps in preparing a wastewater utility plan are outlined below.

- Determine the type and intended use of the utility plan:
  - 1) Existing wastewater treatment plant, interceptor or lift station – no upgrade anticipated within five years;
  - 2) Existing wastewater treatment plant, interceptor or lift station – upgrade necessary within five years;
  - 3) Existing wastewater treatment plant, interceptor or lift station – site approval in progress; or
  - 4) New wastewater treatment works.
- Determine who needs to be involved in the development of a utility plan and the general level of involvement in the process:
  - 1) Operating agency (mandatory);
  - 2) Management agency (mandatory);
  - 3) Watershed association;

- 4) Local governments;
  - 5) Special districts;
  - 6) Technical support group(s) (e.g., consultant company, technical experts);
  - 7) Citizen groups, homeowner associations and the general public;
  - 8) Industries (either through pretreatment program or direct within service area);
  - 9) Planning agency (DRCOG);
  - 10) State agencies (e.g. Water Quality Control Division, State Engineer, Colorado Division of Wildlife); and
  - 11) Federal agencies (e.g. EPA, U.S. Army Corp of Engineers, U.S. Fish and Wildlife Service)
- Collect all existing documentation and compare to outline to determine missing elements or areas requiring revision for new utility plan.
  - Make preliminary contact with potential key informational contacts (Table 2) to;
    - 1) Obtain information needed in the utility planning process; and
    - 2) Determine issues or problems that need to be addressed during the utility planning process.
  - Develop utility planning process schedule.

**Table 2 Key contacts**

<b>Level</b>	<b>Contacts</b>	<b>Types of Information</b>
Local Government	Planning and zoning department; local health department	Urban growth boundary/area; comprehensive plans; zoning; development plans
Management/ Operating Agency	General-purpose government as a management agency or a watershed association as the management agency	Wastewater strategy; existing permits; watershed plans; TMDLs, facility plans; existing infrastructure plans
Planning Agency	Regional council staff or <i>Metro Vision 2020 Clean Water Plan</i>	Metro Vision policy documents, maps of service areas, urban growth boundary/area, population and employment projections, wastewater flows, water quality assessments, wastewater management policies, monitoring information, committee contacts, planning area overlaps
State Agencies	Water Quality Control Division staff including watershed coordinator, permit writer (existing permit),	Regulations (i.e., site approval); effluent limits; permits; TMDLs and/or wasteload allocations, water rights,

Level	Contacts	Types of Information
	revolving loan staff (if potentially interested in state loan); State Engineer for well or other water right issues	loan requirements, air quality permit requirements, stormwater management plan requirements
Federal Agencies	U.S. Army Corp of Engineers, U.S. Fish and Wildlife Service, Environmental Protection Agency and potentially others	Wetlands, floodplains, biosolids application, endangered species, national environmental protection act (NEPA)

### Basic planning requirements

The utility plan or set of plans can be applied to one or more existing or proposed wastewater treatment works. In some cases, joint utility plans between wastewater providers may be appropriate, because of management requirements or to meet water quality goals. A wastewater utility plan document or set of documents provides basic planning information for wastewater treatment works to:

**Utility plans provide information for watershed planning efforts.**

- ❑ Meet requirements of the site approval regulations as adopted by the Colorado Water Quality Control Commission (Regulation 22 contained in Appendix A).
- ❑ Assure that boundaries between adjacent WUSA and CWP planning areas, when identified by a wastewater provider, do not overlap, unless these overlap areas are incorporated into established memorandums of understanding.
- ❑ Assure consistency with the *Metro Vision Plan* process.
- ❑ Provide sufficient technical information and data to amend the regional *Clean Water Plan* related to water quality assessments, watershed management and wastewater management strategies.
- ❑ Provide wastewater treatment works or plant information, discharge data or other relevant documentation to assist in the preparation of total maximum daily loads, wasteload allocations and/or other watershed planning efforts.
- ❑ Provide wastewater treatment works or plant information to assist in preparing discharge permits.
- ❑ Loan application information, if appropriate.

**Rule 5 - Boundaries between adjacent wastewater utility service areas cannot overlap.**

## Preplanning process

A pre-plan preparation review meeting with appropriate utility planning agency and DRCOG (Utility Review Team member and/or staff) is recommended that specially targets the service area designations for wastewater utility service areas (WUSA) and CWP planning areas. Draft map(s) supplied by the applicant should provide a preliminary assurance that the WUSA and/or CWP Planning area are not overlapping with any other known utility plans.

## V. USEFUL DEFINITIONS

**Cluster Treatment Systems** – These are wastewater treatment systems for small groups of clustered dwelling units with a wastewater discharge capacity of less than 50,000 gallons per day. These systems can be low cost, reliable and easily maintained waste disposal alternatives to individual septic disposal systems. Such systems can have wastewater effluent from individual septic tanks or grinder pumps transported a short distance to a collective treatment system. Treatment systems can range from a large drain-field to a small treatment plant (i.e., lagoon system or package mechanical plant).

- The use of cluster wastewater treatment systems (>2 home sites and < 12 home sites) requires a maintenance program and a septic management plan, which can be administered by an established homeowner group, county management agency or other appropriately designated management agency.
- Cluster developments with a permitted wastewater treatment facility (>2,000 gallons per day) require a wastewater utility plan.

**CWP Planning Areas** – The land areas planned for wastewater services that may include *Metro Vision Plan* development types (e.g., urban, semi-urban, urban reserve, or special exemption) and are congruent with the same areas in a county or community's long-range development plan beyond 2020 or at buildout. This planning area has a designated management agency and preferred management strategy, but may not have a designated time horizon, and comprehensively identifies water quality planning issues through wastewater utility planning or septic management plan processes.

[Note: CWP Planning Areas are either equal in total land area to wastewater utility service areas (WUSA) or larger. Consequently, no CWP Planning Area can be smaller than a WUSA. The portion of the CWP Planning Area beyond the urban growth boundary/area is not expected to require urban services until after 2020 (or current planning horizon). However, this portion of the CWP Planning Area can be converted into WUSA through the flexibility provision of the *Metro Vision Plan*].

**Design Capacity** - means the rated capacity (capability of a treatment plant to meet

effluent limitations). This rated capacity shall be given in million gallons per day (MGD) and organic loading in pounds BOD<sub>5</sub> per day. This rated capacity can also be expressed as:

- a) Annual average;
- b) Monthly average; or
- c) Another capacity measure certified by the Water Quality Control Division as appropriate for the treatment plant.

**Domestic Wastewater** - means a combination of liquid wastes, which may include chemicals, household wastes, human excreta, animal or vegetable matter in suspension or solution.

**Domestic Wastewater Treatment Plant** - An arrangement of devices and structures for treating, neutralizing, stabilizing, or disposing of domestic wastewater, industrial wastes, and biosolids.

**Domestic Wastewater Treatment Works** - A treatment plant or facility for treating, neutralizing, stabilizing, or disposing of domestic wastewater, such system or facility has a designed capacity to receive more than two thousand gallons of domestic wastewater per day. Domestic wastewater treatment works also includes appurtenances to such system or facility such as vaults, outfall sewers, interceptor sewers and pumping stations and to equipment related to such appurtenances. The term domestic wastewater treatment works does not include industrial wastewater treatment plants or complexes whose primary function is the treatment of industrial wastes, notwithstanding the fact that human wastes generated incidentally to the industrial process are treated in the system.

**Expansion** - Any construction to increase the design capacity of any facility meeting the definition of domestic wastewater treatment works, which would involve increased organic or hydraulic loading to the sewage treatment plant. It does not mean the replacement in kind of facilities or equipment that would be considered ordinary maintenance. If a modification or replacement does not increase design capacity of the domestic wastewater treatment works, it is not an expansion.

**Accepted Utility Plan** – A complete set of documents or a single document that meets the minimum utility plan requirements and is accepted or conditionally accepted by WEPC.

**Inactive Permit** – The Water Quality Control Division can declare a wastewater treatment permit as inactive under specific conditions. Inactive wastewater treatment systems may remain operational without any permitting requirements. Inactive permit holders do not need to complete a wastewater utility plan, if operating.

**Interceptor Sewer** - a sewer line will be considered as an interceptor sewer if it has an internal pipe diameter equal to or greater than 24 inches and it meets one or more of the following criteria:

- (a) It intercepts domestic wastewater from a final point in a collection system and conveys such waste directly to a treatment plant, the interceptor sewer may also collect wastes from limited numbers (fewer than five connections per mile of sewer) of building services and sewer laterals along its route to the wastewater treatment plant;
- (b) It serves in place of a treatment plant and transports the collected domestic wastes to an adjoining collection system or interceptor sewer for treatment;
- (c) It transports the domestic wastes from one or more municipal collection systems to another municipality or to a regional treatment plant;
- (d) It intercepts an existing major discharge of raw or inadequately treated wastewater for transport directly to another interceptor or to a treatment plant.

**Lift Station** - A wastewater pumping station that pumps the wastewater to a different point when the continuance of the sewer at reasonable slopes would involve excessive depths of burial or that pumps wastewater from areas too low to drain into available sewers. This definition of lift station does not include wastewater-pumping stations for single-family residences or clusters of five or fewer single-family residences.

**Major Wastewater Provider** - Major wastewater providers serve over 200 residential equivalents and/or the permitted wastewater treatment facility has a design capacity greater than 50,000 gallons per day. The treatment plant does not qualify as a minor treatment facility.

**Management Agency** - A management agency is defined in the site approval regulations as: . . . *an entity or municipality appropriately designated by the governor and planning agency in accordance with section 208 of the federal Clean Water Act and state law, with responsibilities to implement all or part of an approved water quality management plan.*

**Minor Wastewater Provider** - Minor wastewater providers generally serve less than 200 residential equivalents. The permitted wastewater treatment plant has a design capacity not exceeding 50,000 gallons per day and the facility does not plan to increase its capacity beyond 50,000 gallons per day within the *Metro Vision Planning* horizon (e.g. 2020).

**NEPA Requirements** – The National Environmental Protection Act establishes requirements for Environmental Assessments and Environmental Impact Statements.

**Non-discharging Wastewater Treatment Works** – Some wastewater treatment works that do not discharge to surface or groundwater can be designated by the Water Quality Control Division as non-discharging and do not require a permit to operate, but do require a site approval and wastewater utility plan.

**Planning Agency** –The Denver Regional Council of Governments (DRCOG) is the designated planning agency for the counties of Adams, Arapahoe, Boulder, Clear Creek, Douglas, Gilpin, Jefferson, the City and County of Denver and the City and County of Broomfield.

**Site Characterization Report** – A requirement of the site approval process, which describes the content of such reports. *[Evidence shall be presented in the form of a report, containing soils testing results and design recommendations and prepared by a Professional Geologist and a Geotechnical Engineer, or by a professional meeting the qualifications of both Professional Geologist and Geotechnical Engineer, with an appropriate level of experience investigating geologic hazards, stating that the site will support the proposed facility.]*

**Special Exemption** – A process to identify and accept those small-specialized wastewater service areas (e.g., recreation destinations, golf courses, convents, prisons, truck stops and other specialized public facilities) that do not conform to the *Metro Vision Plan* or urban growth boundary/area, but require wastewater service.

Isolated mobile home parks that produce wastewater discharges of 50,000 gallons per day or more will be considered urban development (estimate 200-225 trailer units can produce 50,000 gallons of wastewater per day).

**Urban Growth Boundary/ Urban Growth Area** – Defined through the Metro Vision Plan as the land area planned to urbanize within a specific timeframe. This land area is planned by local governments to need urban services and utilities before the year 2020 or other time horizon established by the Metro Vision Plan process.

**Urban** – Land developed in residential, employment, service and other uses in proximity to each other so as to afford convenience, access and community. Residential densities in excess of one dwelling unit per acre and served by either central water or sewer services, or both, are considered urban in nature. The exception occurs where dwellings are clustered to preserve open space in conjunction with an open space plan, or in accordance with an approved wastewater utility plan.

{Note- The Board adopted definition is phrased different and the Clean Water Plan definition will be updated through the 2030 update process}

**Urban area** – The land area that has been developed at densities and in character with the definition of urban and which requires central water and sewer as well as other infrastructure and service needs.

**Wastewater Utility Service Area** – An area generally defined by the urban growth boundary/area (UGB/UGA) that requires wastewater service through the planning horizon (2020). For special exemptions including, but not limited to, parks and open space, commercial developments, industries, golf courses, recreational facilities, camps, and rural villages, the wastewater utility service area may extend beyond or be outside of the urban growth boundary/area. Special exemptions are defined through the *Metro Vision 2020 Clean Water Plan* utility planning process.

**Wastewater Utility Review Team (URT)** – A voluntary wastewater utility plan review team as part of the DRCOG’s Water and Environmental Planning Committee.

**WEPC** – DRCOG’s Water and Environmental Planning Committee.

## VI. IMPORTANT POLICIES TO CONSIDER IN PLAN DEVELOPMENT

### Policy on consolidation of facilities

**Consolidation of wastewater treatment facilities is encouraged, where appropriate.**

The wastewater utility plan should identify and evaluate opportunities for wastewater treatment system consolidation. Often, combined wastewater treatment facilities can provide service more effectively while providing a higher degree of treatment than can be achieved through separate treatment facilities. Facility

consolidation should be addressed in the utility planning process and the decision on whether to consolidate or not to consolidate should be based on economics, cost effectiveness, operations, water quality impacts, physical constraints and water rights.

### Wastewater reuse policy

**The DRCOG Board strongly encourages wastewater reuse as a means of preserving water resources.**

The *Metro Vision Plan* identifies water supply as a scarce and critical component of future growth and development. Reuse is an efficient means of preserving water resources in areas where those resources need to be protected. Consequently, the utility plan should explore any opportunities for wastewater reuse for non-potable uses, future potable

use, or as a method for additional pollutant removal, as appropriate. The utility plan should identify those situations where reuse can be used to fulfill water rights and augmentation plans. The utility plans should identify any reuse considerations as part of the alternative analysis. If reuse is not an option, this should be clearly stated in the utility plan documents.

### Biosolids policy

**The DRCOG Board supports the economic and environmental benefits of recycling biosolids.**

Although there is other legal means of disposing of biosolids (such as incineration and land filling) neither method benefits Colorado as does recycling. Burning biosolids consumes huge amounts of energy and pollutes the air, while burying them takes up valuable space in local landfills. Recycling biosolids is clearly the preferred method for disposal.

DRCOG recognizes and supports the economic and environmental benefits of recycling biosolids, and appropriate council policy documents recognize the value of biosolids recycling. The council's biosolids positions are as follows:

1. Public health and environmental quality are protected under federal and state biosolids regulations. The council encourages member governments not to adopt local public health regulations for biosolids that are more stringent or restrictive than federal or state regulations.
2. The council encourages the practical and beneficial land application of biosolids in the DRCOG region. Member governments with land use authority should regulate biosolids disposal through the zoning and platting process. Local regulations should focus on transportation, aesthetics and land use issues.
3. The council does not support any biosolids disposal practice that does not attempt to beneficially reuse this valuable resource.

A utility plan identifying a biosolids disposal practice that does not include beneficial reuse will not be acceptable to DRCOG.

### **Wetland policy**

If the utility plans could have any effect on wetlands, then the DRCOG wetland policy should be considered in the planning process. Wetlands can have ecological and societal values, which make them an important regional resource. DRCOG supports the concept of wetland protection and all DRCOG plans recognize the value of wetlands as part of the planning process. In recognition of this regional concept, DRCOG adopted the following position.

**The adopted regional wetland policy states ...no net loss of wetland functions within the DRCOG region.**

DRCOG's policy is *no net loss of wetland functions* within the region, while encouraging cost-effective use of wetlands in urban design. Development within a designated or delineated wetland should occur only when no other alternative exists. Wetland mitigation should consist of replacement wetlands of a similar type and quality, as determined by appropriate scientific analysis,

which results in an equal (at the minimum) replacement of lost wetland functions. Wetland replacement within the same hydrologic watershed as defined in the *Clean Water Plan* is the preferred compensatory mitigation measure. Wetland areas can

often co-exist with wastewater treatment plant and provide a buffer area. Utility plans should evaluate the potential of adjacent wetlands for buffering and/or treatment.

### **Policy on adding new treatment plants to the *Clean Water Plan***

Minor treatment works (permanent or limited use fixed capacity plants) can be accepted by Water and Environmental Planning Committee through the wastewater utility planning process without further DRCOG Board of Directors action. New major wastewater treatment facilities (>50,000 gallons per day design capacity) require a Water and Environmental Planning Committee accepted wastewater utility plan and approval by the DRCOG Board of Directors. The *Metro Vision Plan Assessment Process* is the preferred mechanism for approval of new wastewater treatment facilities.

In order for an amendment request for a major new wastewater treatment plant to be taken out of cycle, it must be justified to the DRCOG Board of Directors and approved for separate board action. The applicant can be expected to pay DRCOG reasonable expenses (\$8,500 for members) for such action.

### **Special exemption service area policy**

*Special exemption* service areas (e.g., recreation destinations, golf courses, convents, prisons, truck stops and other specialized public facilities), as identified in the *Metro Vision 2020 Clean Water Plan*, can be served by wastewater service without being designated as within the urban growth boundary/area. The special exemptions are outlined below:

#### **A. *Special exemptions* types (existing and potential)**

##### **1. Recreation destinations and facilities (Including, but not limited to)**

- Day camps
- 24 hour recreation camps, campgrounds or clubs
- Church facilities and schools
- Lodges, inns and spas
- Golf courses and associated club houses
- Retreats
- Parks and associated park use facilities
- Race tracks
- Swim beaches
- Stables and recreational animal operations
- Ski areas

##### **2. Special use sites**

- Convents
- Prisons and detention facilities

- Small air fields
  - Small trailer parks
  - Outdoor laboratories and schools
- 3. Special use areas
  - Rural places (e.g., St. Mary's Glacier, Strasburg)
- 4. Commercial and industrial (size limited on a case-by-case basis)
  - Truck stops
  - Commercial facilities that are isolated (e.g., communication stations, Tiny Town, mini golf courses)
  - Restaurants
  - Light and heavy industry with domestic wastewater permits
- 5. Other specialized public facilities
  - Rest areas.
  - Water treatment plants
  - Clean-up sites (e.g., Rocky Mountain Arsenal, Rocky Flats)

**B. Criteria for making special exemption designations**

1. *Special exemptions* are only accepted with wastewater utility plans developed consistently with this guidance.
2. The designated use requires wastewater service that must be processed through the Colorado Department of Public Health and Environment regulatory program (>2000 gallons per day design capacity of treatment works).
3. *Special exemption* types or areas are identified by the appropriate general-purpose government and designated management agency as not meeting urban criteria.
  - Requires planning department and utility department to address issue.
  - The management agency recommendation must be incorporated into the utility plan.
4. WEPC can recommend a proposed wastewater utility plan to serve a special exemption area if the plan is:
  - Listed in the *Metro Vision 2020 Clean Water Plan*; or
  - Supported by the appropriate general-purpose government and designated management agency; and
  - Recommended by the Board of Directors.

5. *Special exemptions* will be designated as *special exemption wastewater utility service areas*.
  - Service area restricted to the special exemption area designation.
  - Service area does not have to be consistent with the urban growth boundary/area.

**C.** Setting upper capacity limits on *Special exemption* designations.

1. No upper limits should be set on the design capacity of treatment works associated with *special exemption* designations.
  - Case-by case evaluation through utility planning plan.
  - Wastewater flows must be specific to designed use with no excess capacity for service outside of designated area.
2. Wastewater treatment works with design capacity below 50,000 gallons per day (fixed capacity or minor treatment works) can be accepted by WEPC through the utility planning process and consistent with *special exemption* criteria and types.
3. Wastewater treatment works with design capacity above 50,000 gallons per day (major treatment works) will need to be processed through *the Metro Vision Plan Integrated Plan Assessment Process* and approved by the DRCOG Board of Directors.

**D.** Process in relation to utility planning and planning agency review.

1. Proposed *Special exemption* designations are identified in submitted utility plans.
  - Requires appropriate general-purpose government and designated management agency concurrence.
  - Service areas are specific to a defined use.
2. Utility Plan Review Team.
  - Supports proposed special use designation.
  - If design capacity less than 50,000 gallons per day, then only WEPC action required to process site approval.
  - If design capacity beyond 50,000 gallons per day, then WEPC recommend forwarding utility plan into *Metro Vision Plan*.

## VII. WASTEWATER SERVICE AREA CONCEPTS

### Major service areas

**Major wastewater utility service areas exceed 200 residential equivalents or a plant design capacity >50,000 gallons/day.**

If a wastewater provider serves over 200 residential equivalents and/or the permitted wastewater treatment facility has a design capacity greater than 50,000 gallons per day, then the associated WUSA will be classified as major. Defining the overall shape or contiguity of major WUSA for each wastewater service area is a function of *Metro Vision Plan* and not the *Clean Water Plan*.

Establishing internal boundaries within the urban growth boundary/area to create a WUSA is a function of the *Clean Water Plan*.

The *Clean Water Plan* will establish the boundaries between WUSA to assure that there are no overlaps of service areas or CWP planning areas. Utility plans that contain overlapping service areas, whether they are WUSA or CWP planning areas, cannot be accepted by WEPC. Overlap issues must be resolved through local planning processes before being submitted to WEPC for acceptance. WEPC does recognize that mapped variations between the Metro Vision Plan urban growth boundary/area and the WUSA may occur due to mapping issues and level of detail within the next two to three years.

**The shape of a major wastewater utility service area is defined through local planning processes.**

### Minor service areas

**Minor wastewater providers generally serve fewer than 200 residential equivalents or a maximum treatment plant capacity of 50,000 gallons/ day.**

If a wastewater provider serves fewer than 200 residential equivalents and the permitted wastewater treatment facility has a maximum design capacity of 50,000 gallons per day, then the associated WUSA will be classified as minor. If the minor wastewater provider plans to increase its plant capacity beyond 50,000 gallons per day within

the *Metro Vision Planning* horizon (e.g. 2020), then a new and more detailed utility plan will be required before this expansion can occur.

The shape or contiguity of minor WUSAs not defined by the extent of urban development can be identified through the utility planning process. These systems may be isolated wastewater treatment facilities that are not contiguous with the extent of urban development. The accepted minor WUSA may or may not match the property owned by a minor wastewater provider. Although the boundaries of minor WUSA can be defined through the *Clean Water Plan* and may not be required to meet the urban growth boundary/area requirements established by the *Metro Vision Plan*, they may not overlap with other WUSA or CWP Planning Areas. Utility plans for minor wastewater providers

**Minimum utility plans requirements for minor wastewater providers can remain flexible and determined on a case-by-case basis.**

that serve minor WUSA may not be required to meet all policy requirements. The minimum information requirements for minor utility plans will remain flexible in this guidance document. Minimum requirements will be determined by WEPC on a case-by-case basis.

Wastewater providers serving minor WUSAs must have wastewater treatment facility discharge permits. Wastewater providers with inactive wastewater facilities or permits will not be shown in the *Clean Water Plan* and they will not be required to complete utility plans. Service areas for inactive wastewater treatment works will be dealt with on a case-by-case basis and can be processed without a utility plan. Non-discharging facilities, which are active (even if there is an inactive permit), are expected to have utility plans. However, any minor facility being re-issued a discharge permit by the Water Quality Control Division will be treated as a new facility and will be requested to complete a utility plan before being incorporated into the *Clean Water Plan*.

For minor facilities or minor WUSA, the facility capacity and service area is based only on existing area as approved in a site approval or discharge permit. The minor WUSA and the CWP planning area for the minor treatment facility will be assumed equal in area unless amended through the *Clean Water Plan*.

**Service areas for some minor wastewater service areas may not be contained within the urban growth boundary/area.**

**Minor treatment facilities that expand capacity beyond 50,000 gallons/day become major treatment facilities.**

If a management agency or operating agency intends to expand its wastewater treatment facility above the 50,000 gallons per day capacity, then the treatment plant will be treated as a major facility for the purposes of the *Clean Water Plan* planning and approval processes.

### CWP planning areas

Long-range wastewater service areas identified in the *Clean Water Plan* are called CWP Planning areas. No CWP Planning Area can be smaller than a WUSA. The portion of the CWP Planning Area beyond the urban growth boundary/area should be based on approved local comprehensive plans. CWP planning areas can include a future urban area that can extend significantly beyond the designated planning horizon. These additional areas should reflect land identified in local comprehensive or long-range plans for future urban development. In some cases, the CWP planning area may more closely represent the total amount of urban area needed for a projected 2040 population or the ultimate build-out of a utility service area.

**CWP Planning Areas are either equal to wastewater utility service areas (WUSA) or larger.**

The growth and density assumptions and population projections developed through the *Metro Vision Plan* process and used for projecting growth within WUSA cannot be applied to those portions of the CWP planning area beyond the urban growth boundary/area. DRCOG will not assign population and employment distributions to planning areas beyond the Metro Vision planning horizon. Wastewater providers are expected to provide their own density assumptions and flow projections consistent with local comprehensive plans for CWP planning areas.

**CWP Planning areas may represent the ultimate build-out of a service area.**

**A planning area amendment must precede an expansion of a utility service area, if the proposed utility service area extends beyond the urban growth boundary/area.**

The Water and Environmental Planning Committee establish CWP planning areas in utility plans only after acceptance. No amendment to a *WUSA* that extends beyond an established or recommended CWP planning area will be recognized in the *Clean Water Plan*. The *Clean Water Plan* can recognize CWP planning areas that extend beyond the urban growth boundary/area through the Metro Vision Plan

Assessment process. CWP planning area recommendations must be presented to the Water and Environmental Planning Committee for review and recommendation as part of the utility planning process. CWP planning area designations will be mapped and maintained in the technical appendices to the *Clean Water Plan*.

**Overlapping Wastewater Utility Service Areas or CWP Planning Areas will NOT be recognized in the *Clean Water Plan*.**

Local resolution of overlap issues is required before there is regional recognition. The Water and Environmental Planning Committee, watershed associations and council staff may provide appropriate technical assistance to help resolve planning area overlap issues through a utility technical support process established as part of the committee's annual program. Technical support by DRCOG staff will only be provided on a request basis. If conflict resolution cannot be achieved on a timely basis, then one or both entities having a conflict can take the issue directly to the Board for recommendation. The Water and Environmental Planning Committee may also refer policy conflicts to the DRCOG Board of Directors for resolution.

### **Regional envelope concept as used in wastewater planning**

The concept is used to support local county planning efforts and reduce the potential to have new wastewater treatment plant proposals within a specific area before an updated local planning process is completed, yet allow immediately needed wastewater service to proceed. Consequently, regional envelopes are only shown in wastewater utility plans and provide the framework and timing for more specific local planning. The original treatment plant footprint shown in the wastewater utility plan needs to be sufficient to serve to the entire regional envelope.

A regional envelope defines a comprehensive planning study area requiring timely evaluation through county comprehensive planning processes. Part, but not all of the study area is expected to require centralized wastewater service within a 20-year or longer planning period. Based on local input, the planning process will establish the preferred land use designations and identify any specific areas that are likely to need regionalized wastewater service. Once a new comprehensive plan is adopted, this newly defined area(s) then can be designated as CWP Planning Area or Wastewater Utility Service Area or a combination of both and amended into an already accepted wastewater utility plan. Thereafter, the amended wastewater utility plan will not show the regional envelope.

The regional envelope discourages competing applications for additional wastewater treatment plants within the defined area. This regional envelope concept will be needed for treatment plants (existing and new) within the mountains (i.e., Beaver Brook) and on the plains (i.e. Byers, Canyons). The regional envelope is designed to support the Colorado treatment plant consolidation rule and Metro Vision policies.

### **Wastewater utility service to semi-urban areas**

**Wastewater utility service areas (WUSA) can have land areas designated as semi-urban wastewater planning areas.**

Semi-urban areas such as small permanent semi-urban developments (clustered large-lot), agricultural or special use, which may not be economically served by centralized service in the *near-term*, may be designated as semi-urbanized

areas that are to be served by individual sewage disposal systems or on-site systems with a design capacity of 2,000 gallons/day or less. Within a CWP Planning area, these areas may be designated as non-service areas (open space, agricultural areas and low density semi-urban with no more than one residence or structure per 35 acres). Semi-urban areas can also be designated as being expected to eventually urbanize (after 2020) and require centralized services. Wastewater utility plans should address how these semi-urban areas within the CWP planning area will be served. An estimate should be included in the report on when urban service requirements will be available or required.

**Semi-urban areas that do not require centralized services until after the planning horizon may be served by on-site systems in the interim period.**

The nonpoint source management agency, watershed association or other responsible management agency should assume responsibility for semi-urban wastewater planning. Unless otherwise specified, the county is the nonpoint source management agency. This management entity should be requested to provide an appropriate method or methods to evaluate water quality effects related to large lot developments served by individual sewage disposal systems within *semi-urban* wastewater service areas. The wastewater utility plan should map large-lot developments located within designated service areas.

## Metro Vision Plan flexibility provisions

**A community going through a self-certification process to modify the urban growth boundary/area is encouraged to consider**

In utility planning where the proposed service area (present through 2020 planning horizon) does not match the urban growth boundary/area, then adjustments of the urban growth boundary/area and utility service areas must be made through the flexibility provision process included in the *Metro Vision Plan*. The *Clean Water Plan policy* allows automatic adjustment of utility service areas without a separate

amendment process.

Under the *Metro Vision Plan*, a community may go through a self-certification process to modify the urban growth boundary/area. The community is encouraged to consider the following seven topics before notifying DRCOG of a change. If the community is unable to respond to these topics in self-certification, the DRCOG Board of Directors will require this analysis as part of a level II revision.

1. An urban growth boundary/area change should:
  - ❑ Include only those areas within a community's planned growth area as shown in its adopted comprehensive plan;
  - ❑ The affiliated utility department or management agency should determine that it is feasible to provide permanent wastewater service consistent with the *Clean Water Plan*; and the revised area does not result in an unresolved overlap with other utility service areas or *CWP* planning area(s).
2. Based on quantified analysis, changing the urban growth boundary/ area should not cause the existing water quality standards to be exceeded.
  - ❑ For the site-specific receiving waters (i.e., streams, rivers, lakes, reservoirs or groundwater); and
  - ❑ For downstream water bodies in contiguous watersheds due to accumulative loading of pollutants of concern.
3. If there is an existing total maximum daily load allocation(s) or a site-specific wasteload allocation (based on confirmation with the Water Quality Control Division and review of assumptions), then the review should determine that the proposed change(s) does not violate the assumptions of an approved TMDL(s) or alter the allocation(s) to point sources, nonpoint sources or stormwater including the following:

- ❑ Model runs or other calculations using the revised area shall be prepared and must be reviewed with other affected stakeholders before the community proposing the revised area makes a determination of no effect.
  - ❑ Point source, nonpoint source or stormwater discharge allocations set within other portions of the associated watershed or upstream watershed (i.e., the change can not cause an upstream water quality standard(s) or total maximum daily load allocation(s) to be modified).
  - ❑ Pollutants of concern which should include but are not limited to those regulated by permits as listed in the *Clean Water Plan* or contained in the Colorado Water Quality Control Division 303(d) List.
- 4. If a stream segment is listed in the Colorado Water Quality Control Division 303(d) Report as needing a potential total maximum daily load allocation or a wasteload allocation study, then any type of data analysis done by the certifying community should be reviewed with the affected stakeholders before a determination of *no effect* is concluded.
- 5. The urban growth boundary/area change does not create inconsistencies between or require alterations in local water quality management programs, state control regulations or other adopted regional policies.
- 6. The revised area will make no change to the following treatment works components as identified in the *Clean Water Plan* or a wastewater utility plan referenced and accepted in the *Clean Water Plan*, including but not limited to:
  - ❑ Facility siting;
  - ❑ Facility sizing (i.e., change to design capacity);
  - ❑ Effluent limits; or
  - ❑ Long-range or planning horizon population, employment or flow projections.

## **VIII. RELATIONSHIP TO COLORADO SITE APPROVAL PROCESS**

The Colorado Department of Public Health and Environment regulation number 22 (Regulations for the Site Approval Process), effective on April 30, 1998, is contained in Appendix A. Utility plans will need to meet the requirements of regulation 22. The definitions used in the site application regulation should be used to define terms used in any utility plan. Utility plans that have been recognized or conditionally recognized by WEPC will be used in the site approval process.

**Site approvals are needed for construction or expansion of wastewater treatment works, lift stations, and major interceptor lines.**

As part of the state Water Quality Act, site approvals are needed for construction or expansion of wastewater treatment works, lift stations, and major interceptor lines. Final action on site applications is a function of the Water Quality Control Division after a review by appropriate local entities. The state act lists three items for the division to evaluate:

1. Consider the long-range comprehensive plan for the area as it affects water quality and any approved regional water quality management plan for the area;
2. Management of the facility on the proposed site will minimize the potential adverse impact on water quality; and
3. Consolidation of wastewater treatment facilities whenever feasible (Water Quality Control Division guidance, Appendix B).

The *Colorado Water Quality Control Commission* refined these criteria to ensure that:

- ❑ Existing treatment works are not overloaded when connecting new lift stations or interceptors;
- ❑ Proposed treatment works are planned and constructed in a timely manner as needed;
- ❑ Proposed treatment works are developed considering the local long-range comprehensive plan for the area as it affects water quality and any approved regional water quality management plan for the area;
- ❑ Proposed treatment works or interceptor protects water supplies;
- ❑ Proposed treatment works or interceptor has been properly reviewed by all necessary local, state, and federal government agencies and planning bodies;
- ❑ Proposed location will have no foreseeable adverse effects on the public health, welfare, and safety;
- ❑ Applicants will provide for adequate operational management, including legal authority and financial capabilities;
- ❑ Proposed treatment works be located so that it is not unnecessarily endangered by natural hazards; and
- ❑ Objectives of other water quality regulations will not be adversely affected.

**Operating agencies must certify that the treatment works will not be overloaded by the addition of wastewater flow from new lift stations or interceptors.**

Site applications that meet *Clean Water Plan* and *Metro Vision Plan* policy requirements will be recognized as consistent with the *Clean Water Plan*, and so referenced in the site approval process or to meet other appropriate regulatory requirements.

When a site application for a lift station, treatment plant, or interceptor is submitted for review after approval of a utility plan, lift station report, or interceptor report, the DRCOG staff will review the application for consistency with the approved plan or report. Such review shall consider the siting, sizing and service area of the lift station, plant, or interceptor. If the staff finds the application consistent with the plan or report, DRCOG will recommend approval of the site application and forward those findings to the Water Quality Control Division without separate action by the Utility Plan Review Team or WEPC. The list of site approvals approved by DRCOG in this manner will be published in the WEPC's next agenda as an information item.

If the staff cannot determine that the application is consistent with the plan or report, the Wastewater Utility Plan Review Team will review the application. The team can find that the application is consistent, request the applicant to revise the application to make it consistent, recommend that the utility plan or lift stations report be revised to make the application consistent, or recommend disapproval of the site application and prepare comments to the Water Quality Control Division documenting the inconsistency. This recommendation will be forwarded from the Utility Plan Review Team to the Water and Environment Planning Committee for review and action

The site approval regulation allows:

*In the interest of facilitating a more effective and timely review of proposed new and expanded domestic wastewater treatment works, each planning agency may establish and implement a coordinated review and comment process to carry out the provisions of this regulation in coordination with its water planning responsibilities. Where a planning agency wishes to establish such a coordinated process, the Division may enter into an agreement with the planning agency specifying the procedures for this coordinated process. The intent is to establish a single process 1) to meet these site approval requirements and 2) to meet the requirements for amendments to the water quality management plan. The process should be designed so that a new or expanded domestic wastewater treatment works which is approved as part of the water quality management plan may be concurrently deemed to also meet the requirements of these site approval regulations at the time of its inclusion in the plan. Under such a coordinated process, the Division retains final authority for approval or denial of each project, which is regulated under these site approval regulations.*

The wastewater utility plans meet the requirements of the site application process, and provide the initial planning information needed by the division in the permitting process and in the revolving loan program. CWP planning areas will be used in the review of site approvals where it is necessary to size facilities such as interceptors based on a planning horizon that extends beyond 2020 to provide cost-effective service. In general, treatment

facilities and lift stations should be staged to provide for 10-year capacity increments, but may be staged for shorter (e.g. lift stations) or longer periods with appropriate economic justification. However, wastewater infrastructure designed to only serve CWP planning areas (i.e., outside the urban growth boundary/area) will **not** be accepted in the site approval process.

**Interceptors may be staged for ultimate build-out with appropriate economic or right-of-way justification.**

Wastewater infrastructure designed to serve areas within the WUSA can be physically sited outside of the urban growth boundary/area. Lift stations should be staged and sized not to serve any CWP planning area. Since interceptors are often sized to last beyond 20 years, they may have excess capacity more appropriate to ultimate build-out of a designated area. The utility plan should include a reasonable rationale for sizing interceptors.

## **IX. UTILITY PLANS FOR EXISTING OR NEW WASTEWATER PLANTS**

### **General requirements**

Utility plans document the wastewater management strategy for a wastewater treatment facility (greater than 2000 gallons per day capacity) and the associated planning area. All utility plans will respond to appropriate state or federal requirements and contain a defined set of minimum information (location, sizing, staging, service area, process system, effluent quality and financial arrangements).

Utility plans for minor facilities or minor WUSA may be approved even though they do not meet all of the recommended planning elements provided sufficient planning is completed to show that there will not be negative water quality effects from any proposed new facility or facility expansion. Utility plans will provide planning documentation for both the designated utility service area and planning area, with the utility service area having the maximum level of information.

**Utility plans define location, sizing, staging, service area, process system, effluent quality, financial arrangements and appropriate state or federal requirements.**

The primary goals in establishing wastewater utility plans are to provide reasonable, feasible and economical wastewater service to an area designated for development within the DRCOG watersheds. Utility plans should consider the water quality impact the treatment system will have on receiving waters. The utility plan should include any strategy for meeting all applicable water quality standards and classifications, while quantifying the potential impact a discharger may have on other dischargers.

The council maintains a file of accepted utility plans developed by management agencies or operating agencies for all wastewater treatment facilities with a discharge permit. The siting and expansion of direct industrial discharges are identified in the

*Clean Water Plan* under special provisions. Direct industrial dischargers who also process domestic wastewater from outside the industrial site are required to have a wastewater utility plan. Any wasteload allocation or total maximum daily load analysis included in a utility plan is based on population and employment forecasts and wastewater flow estimates developed through the *Metro Vision Plan*.

## **Environmental components**

If a wastewater provider intends to apply for a state revolving loan, then the requirements of the National Environmental Protection Act (NEPA) apply to the planning and review process (40 CFR, Parts 1500-1517). Integrating the NEPA process early in the planning stages ensures that decisions reflect environmental values, avoid potential delays later in the process and reduce conflicts. The NEPA process can result in the preparation of an Environmental Assessment or an Environmental Impact Statement. The utility plan should reference any NEPA processes that are or may be required to implement the wastewater management strategy.

## **Utility plan components**

### Service area designations

The utility plan can recognize three types of wastewater service areas: Wastewater utility service areas (WUSA), CWP planning areas and if necessary regional envelopes. WUSA are defined as those areas within the *Metro Vision Plan Urban growth boundary/area* that require urban services through the 2020 planning horizon or any subsequent modification to the urban growth boundary/area or planning horizon. CWP planning areas are based on existing local comprehensive plans, comprehensive long-range utility plans or the area a wastewater provider intends to service at ultimate development. CWP planning areas are either equal to wastewater utility service areas or larger. Consequently, no CWP planning area can be smaller than a WUSA. CWP planning areas that are beyond the *urban growth boundary/area* are not expected to require urban services within the 20-year planning horizon. CWP planning areas are expected to become part of the urban growth pattern after 2020. Because it is important to avoid overlaps in plans and service area, it is encouraged that the proposed plan area be submitted to DRCOG for review and comment before beginning a utility plan.

### Population and employment datasets and forecasts

All wastewater utility plans will use DRCOG conformity population and employment datasets. The foundation of water quality planning is the forecast of expected wastewater treatment needs, which is tied to future population and employment levels. Forecasts define wastewater flow rates and the capacity

**The council generates and maintains population and employment forecasts and wastewater flow estimates for selected planning years (five-year increments) for wastewater providers. The council will not generate population, employment or wastewater flow data sets for CWP planning areas.**

needed to treat the projected volume of wastewater. Datasets and forecasts for utility service areas and planning areas must be consistent with the *Metro Vision Plan* and any subsequent updated datasets. Population and employment forecasts for the urban growth area by selected planning years through 2020 are defined by data sets produced for the *Metro Vision Plan* process. Wastewater utility plans can use equivalency processes to convert population and employment datasets to wastewater flows within defined WUSA for selected planning years (five-year intervals). Wastewater utility plans cannot show alternative projections for WUSA.

Wastewater utility plans will need to provide their own projections and flows for CWP planning areas or WUSA beyond the year 2020. As necessary for cost-effective utility service, CWP planning area forecasts may be used to size a wastewater facility (e.g., the size of an interceptor, land area needed for a treatment facility or lift station site).

### Wastewater flow characterizations

The *wastewater utility plans* will use datasets as a basis for wastewater flows in five-year increments for major and minor WUSA and for semi-urban service areas defined by management agencies at the watershed level. Utility plans must list appropriate correction factors used to convert dataset information into flows. These correction factors must be supported by measured data (e.g., Discharge monitoring reports (DMRs), when available).

### Infiltration and inflow analysis

The Water Quality Control Division for some treatment works may require an infiltration and inflow (I & I) analysis. The utility plan should contain any infiltration and inflow study results, if appropriate for the facility.

### Peaking factor

The peaking factor established in the 1977 regional management plan and subsequently confirmed through the planning process as used by DRCOG in reviewing site approvals and for interceptor certification is:

$$\text{Peaking Factor} = 3.65 / (\text{Average Total Flow MGD})^{0.167}$$

**(The maximum peaking factor value used in any assessment is 5.0)**

Generally, the average total flow is based on the 30-day monthly average. Under site-specific conditions, an annual average flow or other specified flow certified by the Water Quality Control Division can be used to determine peaking factor. Additionally, the utility plan may use a different peaking formula or factor, provided additional site-

specific justification is included in the utility plan.

Local data documenting peaking factors can serve as justification for alternate peaking factors. The maximum peaking factor of 5.0 is generally applied to small treatment systems or special use sites (e.g., church camps, restaurants, day camps). No minimum peaking factor is recommended in this guidance, however a factor of 1.0 or less would not be acceptable. Otherwise, the above peaking formula should be used for planning purposes in utility plans.

### Wastewater flow planning factors

Table 3 provides some planning factors used to estimate wastewater flows. These numbers are provided for guidance and other factors can be used provided they are identified within the utility plan. The *Clean Water Plan* uses a residential wastewater flow factor of 85 gallons/person/day, which includes a 10-gallon/person/day inflow and infiltration component. The average household size in the nine-county metropolitan area is 2.5 people/household. This number can range from about 2.35 to 2.75 in specific locations.

The *Clean Water Plan* also recognizes a wastewater flow generated by employment with the regional average at 50 gallons/employee/day. Generally, this 85/50 wastewater flow factor calculation provides a good projection and the numbers have been verified using the daily and monthly reports submitted to the Water Quality Control Division. Lacking employment data, a factor of 100 gallons/person/day as a residential equivalent can provide, generally, comparable projections.

**Table 3 Factors used in the *Clean Water Plan* to estimate wastewater flow**

Types of Use	Average Wastewater Flow
General Population	
Single or Multi-family Equivalence - Regional	85 gallons/day/person
General Employment	
General Employment - Regional	50 gallons/day/person
Household Equivalent (Residential development without employment)	
Households	250 gallons/household/day
Site Specific Planning Averages (gallons/day/person)	
Stores, Offices, Small Business - Employees	25
Stores, Offices, Small Business - Guests	8
Hotels/Motels - Employees	50

Types of Use	Average Wastewater Flow
Hotels/Motels - Guests (24-hrs)	20
Cabins - Guests (24-hrs)	50
Dining Facilities (Per Meal)	10
Schools (no showers) - day use (8-hrs)	12
Schools (showers) - day use (8-hrs)	25
Tourist/Trailer Camps - Employees	50
Tourist/Trailer Camps - Guests (24-hrs)	85
Recreational Facilities - Employees	50
Recreational Facilities - Guests	20

### Character of influent

The character or strength of wastewater influent can affect treatment plant design and operation. The utility plan should identify any unusual characteristics of the wastewater or special connectors that could alter the influent quality. If default values for biological oxygen demand (BOD) and total suspended solids (TSS) are used in the design process, then these values should be listed in the utility plan.

### Industrial pretreatment

**Some industries discharging pollutants must pretreat their wastewater before discharging into municipal sewers.**

The term *pretreatment* refers to the requirement that industries discharging pollutants treat their wastewater before discharge to municipal sewer systems. The three objectives of the *National Pretreatment Program* are:

1. Protect municipal wastewater treatment systems from interference caused by industrial wastes;
2. Protect the nation's waters from industrial pollutants which pass untreated through wastewater treatment systems; and
3. Provide for the beneficial use of wastewater biosolids as soil conditioners and fertilizers, by preventing excessive contamination by industrial pollution.

The U.S. EPA administers the National Pretreatment Program under the General Pretreatment Regulations, first adopted in 1978. These regulations, amended in 1981 and again in 1988, establish specific requirements that both wastewater treatment facilities and industries must comply with to reduce industrial pollutant discharges. The *General Pretreatment Regulations* require that any wastewater treatment facility designed to treat over five million gallons a day of wastewater, or receives significant discharges from industrial sources, must develop a local pretreatment program conforming to EPA regulations. Management and operating agencies must meet specific requirements under the *General Pretreatment Regulations*. Wastewater utility

plans should include the following components for those wastewater treatment facilities subject to pretreatment regulations.

- ❑ Identify any local limits for toxic and other pollutants as necessary to protect sewage treatment operations, treated wastewater and biosolids quality.
- ❑ Describe the program to identify all commercial and industrial dischargers subject to regulation under the Pretreatment Program. These dischargers are referred to as significant industrial users.
- ❑ Describe the program to issue permits to all significant industrial users and to require discharge monitoring and reporting.
- ❑ Document how significant industrial user operations are monitored for compliance with federal and local pretreatment standards and requirements.

### Treatment works characterization

#### Location and siting of treatment plant

**The utility plan must include location of plant (site foot-print) and related infrastructure.**

Utility plans must locate existing and/or planned wastewater treatment works to serve areas defined within WUSA or located in CWP planning areas. The treatment plant footprint (shape and total acreage) must be described or mapped. The minimum footprint needs to be able to accommodate all appropriate infrastructure identified for a 20-year planning period. Utility plans must locate existing and planned lift stations to serve areas defined within WUSA or located in CWP planning areas. Existing facilities and facilities to be built within two years should be shown at a specific location.

New facilities planned beyond a two-year time horizon may be shown/mapped at a specific location or may be shown in a general area, as long as water quality issues are essentially the same within that general location.

#### Existing process system

The utility plan includes a summary of the major system processes and types of treatment for an existing treatment works including:

- ❑ Level of treatment (i.e., secondary, advanced for phosphorus removal, etc.);
- ❑ Analysis of existing system performance, deficiencies and positive attributes;

**Summarize all major system processes including design capacity of major treatment processes.**

- Sizes of system components; and
- Biosolids processing system and method of beneficial reuse or disposal.

#### Schematic of treatment works

The utility plan should contain a schematic drawing of the treatment works in sufficient detail to characterize the flow processes, capacities and operations.

#### Infrastructure sizing and staging

**The maximum level of detail is required for capital improvements anticipated within a five-year period.**

Include current capacities and projected future capacities for all treatment plants, lift stations, and interceptors (including a construction schedule based on time or capacity milestones) that are needed to serve the wastewater utility service area. In addition, include those facilities needed to serve the CWP planning area, if appropriate. For facilities that need to be constructed within five years, the location, staging and capacity must be estimated with detailed flow projections. The implementation of the five-year capital improvement program should be outlined with critical dates listed. The level of detail and accuracy for projected infrastructure capacities decreases beyond the five-year period. The level of detail in the utility plan should be based on the following considerations:

- Six to 15 years, planning for major infrastructure and projects with projections and capacities based on best professional judgment;
- 16-25 years, include only anticipated major expansions without projections; and
- >25 years, concepts only as related to local comprehensive plans or predicted ultimate development.

Sizing and staging of the wastewater treatment facility are tied to the DRCOG's projections of population and employment. This size, or hydraulic capacity, is based upon two factors: the rate of flow (annual average daily) produced by the sewer customers and the staging of construction or expansion.

**20-year planning capacity with a 20% design flow margin of safety identified for planning purposes.**

The policy direction in the *Metro Vision 2020 Clean Water Plan* is to have wastewater treatment plants designed for a 20-year period. Local population projections used to generate wastewater flow projections should be documented and differences between regional projections and local projections explained. Constructing facilities in 10-year increments or stages is encouraged, but longer staging is acceptable with appropriate economic evaluation.

### Odor control considerations

Odor control is a significant local issue at many wastewater treatment plants in the metropolitan region. Odor control may be an important component of the system design and alternative selection process. The utility plan should address odor considerations, including any odor control studies, strategies or abatement programs. Wastewater treatment facilities are required to meet odor control regulations.

### Air quality permitting requirements

Some wastewater treatment plants and processes within treatment plants are identified as stationary sources. Consequently, wastewater treatment plants with a design capacity of 10 million gallons per day or greater may require an air quality permit. The Air Division should be contacted for air quality permitting requirements. The utility plan should identify any air quality permitting requirements.

### Stormwater management plan

Wastewater treatment plants over 1 million gallons per day are required to prepare a stormwater management plan as part of the stormwater permitting requirements. The Water Quality Control Division should be contacted for stormwater permitting requirements. The utility plan should include a summary of the approved stormwater management plan, if applicable.

### Site characterization requirements

The site approval process for new wastewater treatment works and new lift stations requires evidence of the suitability of the site. The site must be characterized in relation to floodplains and other natural hazards. Specifically, the utility plan must identify flood hazard issues and geological suitability issues related to the proposed site (or site envelope) and the measures to be taken to mitigate any identified problems or risks. For all new sites, a soil testing report should be attached to the utility plan. The report contains testing results and design recommendations prepared by a professional geologist and a geotechnical engineer, or by a professional meeting those qualifications.

### Collection system

#### Interceptor

The utility plan must list lines in the systems that qualify as interceptors. The definition of an interceptor in the *Regulations for the Site Application Process* (WQCC regulation #22) is:

*. . . a sewer line will be considered as an interceptor sewer if it has an internal pipe diameter equal to or greater than 24 inches and it meets one or more of*

*the following criteria: (a) it intercepts domestic wastewater from a final point in a collection system and conveys such waste directly to a treatment plant, the interceptor sewer may also collect wastes from a limited number (fewer than 5 connections per mile of sewer) of building services and sewer laterals along its route to the wastewater treatment plant; (b) it services in place of a treatment plant and transports the collected domestic wastes to an adjoining collection system or interceptor sewer for treatment; (c) it transports the domestic wastes from one or more municipal collection systems to another municipality or to a regional treatment plant; (d) it intercepts an existing major discharge of raw or inadequately treated wastewater for transport to another interceptor or to a treatment plant.*

The Colorado Water Quality Act provides special procedures for review of interceptors.

Ninety days prior to the construction of an interceptor line, the responsible entity will notify DRCOG and the WQCD. This notification will include a certification that the treatment facility has the capacity to treat the projected flow from the interceptor. DRCOG is required to certify within 30 days that the interceptor line has the capacity to carry the projected flow. If these certifications cannot be provided, the entity must apply for a site application.

**The utility plan will contain maps of all qualifying interceptors, including location of existing and planned interceptors to serve WUSA or CWP planning areas.**

Projections for major lines are developed on a case-by-case basis for use in this certification process. The four steps in the certification process include:

1. Determine consistency of service area with utility service area or planning area.
2. Calculate year 2020 population and flow based on *Metro Vision Plan* projections. Compare these with interceptor capacity. If capacity is less than projected flows, review with entity responsible for construction. Such review may indicate differences in assumptions or design parameters. If these items can be resolved, a certification of adequate capacity can be provided.
3. If the interceptor's capacity is significantly greater than year 2020 flows, then the review will be based on design assumptions. If the interceptor is designed for the year 2020, the policy regarding review of growth assumptions will be used.
4. If the interceptor is designed to serve a population projected to grow beyond the year 2020, DRCOG can only certify that the interceptor has adequate capacity to carry flows in the year 2020.

**The utility plan needs to locate or site all major lift stations.**

Lift stations requiring site approval

For utility planning, any lift station requiring a site approval must be mapped and characterized. Wastewater providers are encouraged to evaluate and map all lift

stations as part of the planning process. The minimal recommended mapping of major lift stations should include those systems that have an average pumping capacity that is 1/5 or greater of the existing treatment works capacity (i.e., a 100,000 gallon per day treatment facility will list all lift stations at or greater than 20,000 gallons per day) or any lift station over 0.5 million gallons per day.

### Water quality characterization

#### Water quality limited receiving water

**Is the receiving water quality limited?**

For all treatment facilities, the utility plan must identify whether the receiving waterbody (or any downstream waterbody affected by the discharge) is currently water quality limited. This applies to all constituents discharged or to be discharged by the facility.

Additionally, if there is a potential for a water quality limited segment within a 10 year period, based on the current 305(b) report, modeling or other water quality data, this must be included in the utility plan.

If the discharge quality is/will be controlled by a water quality limited waterbody, then an identification of the constituent(s) of concern and source identification of water quality limited designation (e.g., 303(d) list, 305(b) report or watershed association planning and implementation effort) needs to be included in the utility plan. The utility plan must identify any wasteload allocation (concentration, poundage and/or other alternatives) by constituent(s) as they apply to the treatment plant. Therefore, the utility plan should contain:

- ❑ For treatment plants that will not be built or expanded for 10 or more years, a general discussion of the constituents to be controlled and the availability of allocations for the waterbody are sufficient. Exact concentration or poundage estimates are not necessary unless there is a conflict with an existing total maximum daily load (TMDL) or wasteload allocation (WLA).
- ❑ For wastewater treatment plants to be built or expanded within the next 10 years, a recommended treatment technology and treatment plant configuration to meet the projected discharge permit limitations and a listing of alternative technologies for consideration. The utility plan must provide documentation that achieving the projected effluent limitations is technically and economically feasible.

#### Level of treatment for new and expanding facilities

The utility plan shall list the effluent discharge quality necessary to meet receiving water quality classifications and standards, including:

- ❑ A list of projected discharge permit limitations based on state effluent standards (copy of letter from Water Quality Control Division), receiving water

**If available, provide the recommended effluent discharge quality.**

classifications and established water quality standards;

- ❑ Discharge quality necessary to meet any total maximum daily loads or wasteload allocations as listed or recognized in the *Clean Water Plan* for time horizon identified in the plan; and
- ❑ Other effluent limits recommended in the *Clean Water Plan* and/or necessary to meet state requirements.

#### TMDLs and wasteload allocations

Utility plans should document any approved or proposed total maximum daily load studies or wasteload allocations. The receiving waters need to be checked against the Water Quality Control Division's 303(d) List and the 305(b) Report. Wasteload allocation requirements can affect effluent limits and treatment options.

#### Watershed issues

Utility plans should document any watershed programs and implementation strategies. Since the watershed protection approach is advocated in the *Metro Vision 2020 Clean Water Plan*, the utility plan will need to address how a wastewater management plan fits into the watershed program.

#### Minimum mapping requirements

Mapping requirements may differ between minor and major wastewater utility plans. Both electronic (Arc-View) and hard copy maps will be acceptable for WEPC review. Hard copy maps that are of sketch quality or excessively small will not be acceptable. The minimum features to be included on maps include, but are not limited to, drainage basin and watershed, service area (WUSA and CWP planning areas), treatment plant or treatment works, lift stations, interceptors, water features (stream segments, lakes, reservoirs), discharge point, water well fields, sanitary sewer tributary areas (if available) and local comprehensive plan features. Mapped features should be consistent with the site approval regulations. U.S. Geological Survey topographic maps at the 1:24,000 scale may be used for mapping most features, if the service areas are defined separately at the census block level.

Based on mapping efforts included in recent utility plan submittals, some additional specific minimum map details are strongly recommended:

- ❑ County lines and names
- ❑ Municipal boundaries with areas clearly labeled
- ❑ Local urban growth boundaries

- ❑ Major and minor roads with labeled names
- ❑ Scale and north orientation
- ❑ Reproducible map quality (final utility plan submittals)
- ❑ Area covered by site (soils) characterization report

**Maps included in the utility plan of wastewater service areas should be detailed enough so that it is clear if an area is inside or outside of the urban growth boundary/area.**

Identify WUSA and CWP planning areas by watershed(s) as defined in the *Metro Vision 2020 Clean Water Plan*. The wastewater utility service area map must show the WUSA and, if desired, the CWP planning area (or more than one plant operated as a coordinated system, e.g. satellite plants). For WUSA and CWP planning areas, the

utility plan maps should identify areas to be served by gravity sewers and identify those areas served through one or more major lift stations.

Alternatives analysis

For proposed or new wastewater treatment works, the utility plan needs to provide alternatives analysis. The alternative analysis should address the potential for consolidation with other existing treatment works. The utility plan needs to list the criteria used to select a preferred alternative. Additionally, the selection of a preferred alternative should have a public review and comment component. Any consolidation analysis must be consistent with the Water Quality Control Division policy on consolidation in Appendix B.

**Management and financial plans**

Management structure and agreements

**The utility plan must identify management agency and applicable agreements.**

The utility plan must identify the management agency, associated watershed association, if applicable, and operating agency(ies), along with applicable management agency agreements or other memorandums of understanding. Utility plans should include maps of collection and other associated special districts. Key contact(s) with the management and/or operating agency will need to be listed in the utility plan. The utility plan may need to list any special rules or regulations applicable to the service area, along with external service contracts and other operational or management agreements.

## Financial considerations

For:

**Estimate 10-year capital costs and summarize sources of revenue.**

- New wastewater treatment agencies;
- Any wastewater treatment facility that is in repeated noncompliance with significant permit requirements; or
- Treatment agencies expecting to increase the volume of wastewater treated by more than 100 percent in the following 10 years, then capital costs should be estimated for all new wastewater treatment plants, treatment plant expansions, new lift stations, lift stations expansions, and interceptors that will be built within the next 10 years.

Changes in operating costs and total expenditures necessary to carry out the wastewater system improvements planned within the next 10 years should be estimated with a discussion of the sources of revenue necessary to meet those expenditures. Wastewater treatment agencies that rely on projected new customers to provide the revenue sources to build additional facilities need a financial management plan, which addresses, at the minimum, the following items:

- Rate and charge structures;
- The financial solvency of the agencies if the projected growth should not occur;
- Institutional arrangements to guarantee payment of charges from large connectors (over 10 percent of the projected revenue) and from other governmental connectors;
- Interest in applying for a state revolving loan to finance any infrastructure or improvements;
- Significant industrial user(s) under pretreatment regulations, arrangements for meeting pretreatment responsibilities; and
- Industrial or commercial sewer connections with the potential to overload the treatment plant hydraulically or with organic loading, a description of the methods for controlling rates of flow to the treatment facility.

## Interest in revolving loan

The utility plan should identify any interest by the management agency in applying for a revolving loan with the Colorado Water and Power Authority. Those utility plans showing an interest in a loan will be recommended to the Water Quality Control Division for inclusion on the state's revolving loan eligibility list. Those utility plans showing an

interest in a loan should include a user charge study. A financial plan is required if any type of payback system (loan, bonds, etc.) is utilized for existing or new customers. A developer may be required to provide financial information, evidence of ability to finance or similar information.

### Required checklist

The outline of preferred chapters in the utility plan document, including those required planning elements are shown in Table 4. A utility plan can be done using a different format provided that the new structure is explained in the document introduction. The wastewater utility review team is voluntary members from WEPC who desire a smooth and timely review process. Consistency in documentation preparation can help expedite the review process. The applicant and management agency should use the checklist in their review processes.

**Table 4 Preferred checklist**

Chapter	Includes	Check-List
I. Executive Summary (Required)		
II. Introduction	Background & History	
	Implementation Schedule & Timing Issues (Required)	
	Summarize The Utility Plan Document Structure, If Different From Recommended Outline	
III. General Planning	Consolidation Of Facilities (Required)	
	Wastewater Reuse	
	List Any Applicable Compliance Schedule Or Consent Decree	
	Environmental Components Evaluated (Required)	
	Summary Of Environmental (NEPA) Information Or Special Studies	
IV. Wastewater Characterization	Service Area Designations WUSA & CWP Planning Areas (Required)	
	Population & Employment Datasets & Associated Forecasts (Required)	
	Wastewater Flow Projections (Required)	
	Infiltration & Inflow Analysis	
	Character Of Influent	
	Industrial Pretreatment Program	
	Treatment Works (Required)	
	Existing Process System	
	Infrastructure Sizing & Staging	
	Location & Siting	
	Biosolids Handling	
	Schematic Of Treatment Works	
	Odor Control Considerations	
	Air Quality Permit, If Appropriate	
	Stormwater Management Plan (Site Plan)	
	Site Characterization Report Summary	
	Collection System (Required)	
Major Lift Stations		
Interceptors		

Chapter	Includes	Check-List
	Maps (Required) Treatment Plant Site Envelope Service Areas Collection System	
V. Water Quality Characterization	Water Quality Of Receiving Water (Required) TMDLs And/Or Wasteload Allocations (Required, If Applicable) Watershed Issues Level Of Treatment (Required, Existing Permit Limits Or Projected Limits) Maps Watershed & Receiving Waters (Required) Impaired Waters	
VI. Alternative Analysis	Treatment Works (Required) Level Of Treatment (Required) Public Participation In Selection Process	
VII. Management & Financial Plans	Management Structure & Agreements (Required) Wastewater Management Plan Financial Management Plan (Required) Revolving Loan Interest (Other Application Documents Are Required If A Facility Applies For Loan, Which Do Not Need To Be Part Of The Utility Plan) User Charge Summary	
VIII. References	Reports & Special Studies	
IX. Technical Support Appendices	Legal Description & Evidence Of Site Ownership ( <b>Required</b> ) Agency Contacts (Cover Letters Or Checklist) Special Surveys (E.G., Endangered Species) NEPA Process, If Appropriate Site Characterization Report ( <b>Required</b> ) Effluent Limits ( <b>Required For Existing Treatment Works</b> ) Preliminary Effluent Limits ( <b>Required For New Treatment Works, Letter From WQCD</b> ) Planning & Zoning Information (E.G., Portion Of Local Comprehensive Plan) ( <b>Required</b> ) Intergovernmental Agreements User Charge Study Analysis Air Quality Permit Odor Control Studies Or Plans Stormwater Management Plan Summary Of Public Hearings & Process Infiltration And Inflow Study	
X. Referrals	Document Notification For All Referral Agencies	

## Wastewater utility plan documents

**A wastewater utility plan can be a set of linked documents, provided all linked documents are filed in the reference library as the *final utility plan*.**

A wastewater utility plan may consist of one report (document) or a number of separate utility reports prepared by the same agency or a combination of agencies. Multiple documents can provide separate geographical detail and/or facility detail, or they separately meet the goals of the wastewater utility plan. Multiple documents must be submitted to WEPC as a set, including all appropriate maps, when the utility plan is first

submitted to WEPC for acceptance. Thereafter, only those documents that are updated, amended or otherwise changed need be submitted to WEPC for acceptance. The utility plan report or set of documents and all subsequent support documentation will be filed and maintained by DRCOG as the *accepted utility plan* for a specified treatment plant. Accepted utility plans will need to be reviewed every five years or amended from time-to-time. Additional update or amendment documents can be appended to the original utility plan, after acceptance, without re-issuing the final utility plan. A database will be maintained by DRCOG on final utility plans and any supplemental documents.

### Distribution and number of copies

Copies of all final utility plans, with associated maps and requested documents, will be provided to DRCOG for distribution to the wastewater utility plan review team (Table 5). The total number of copies can vary, depending on the utility plan type and area. Twelve copies are needed by DRCOG staff to begin the regional review process. Additional copies may be requested on an as needed basis. After all approval and required amendments, the applicant must provide three copies of all final documents that are defined as the utility plan to DRCOG for distribution to the WQCD to accompany the acceptance or conditional acceptance letter from DRCOG. DRCOG will retain one utility plan as a permanent record. The applicant is responsible for distributing copies to the management agency. DRCOG is responsible for the distribution of copies for the review and acceptance.

**Table 5 Review and final copy distribution**

Review Process	Complete Set of Documents
DRCOG Staff	1 (Required for Review)
WEPC Wastewater Utility Review Team	10 (Required for Review)
Other Sign-off Agencies	Varies (maximum 4)
Adjacent Cities, Towns or Counties	Varies (case-by-case basis)
Local Health Departments	1 (Required for Review)
Accepted Final Copy	Complete Set of Documents
WQCD	1

## X. LIFT STATION REPORT

### Report guidance

This lift station guidance is extracted from the *Wastewater Utility Plan Guidance* document (DRCOG 2002), which still takes precedence as the guidance document. The policy direction is contained within the *Metro Vision 2020 Clean Water Plan*. The lift station report supports documentation contained within a wastewater utility plan and is a component of a wastewater utility plan. Information provided within a lift station report must be consistent with the *Wastewater Utility Plan Guidance* and policies contained within the *Metro Vision Plan* and the *Metro Vision 2020 Clean Water Plan*.

Even when wastewater utility plans for treatment plants are accepted by DRCOG, a lift station report is necessary to accompany a site approval application submittal to the Water Quality Control Division. A lift station report without an associated accepted wastewater utility plan must be a comprehensive document, while those lift station reports associated with an accepted utility plan will only provide specific details needed for permitting and reference the remaining checklist in the accepted wastewater utility plan. A lift station report that references an accepted utility plan must identify the page location within the utility plan where the specific information can be found.

A lift station report is sufficient for submittal and approval by the Water and Environmental Planning Committee (WEPC) as a component of a wastewater utility plan for use in the site approval process. A lift station report can precede acceptance of a wastewater utility plan as a separate document for future incorporation into a final wastewater utility plan, if it meets the following criteria:

1. The operating agency, as designated in the *Metro Vision 2020 Clean Water Plan*, agrees by letter to incorporate by reference or entirety the lift station report into a final wastewater utility plan and agrees that the planning information provided is correct and consistent with the future utility plan. The operating agency must confirm by letter that the treatment works has the capacity to treat flows generated by the lift station when fully developed as listed in site application. The management agency, if different from the operating agency, must also support by letter the lift station report.
2. Lift station(s) will serve an area entirely within the current urban growth boundary/area as shown in the *Metro Vision Plan*. Any modification to the urban growth boundary/area is a local government process. This action must proceed before there is any review consideration of a lift station report through the regional utility plan review process, including acceptance by the designated management agency. Service area or urban growth boundary/area conflicts can be referred to the DRCOG Board of Director for action. The Lift Station Report must demonstrate

consistency with the *Metro Vision Plan*. The WEPC will not resolve service area conflicts. However, the WEPC will not accept a Lift Station Report that is inconsistent with the *Metro Vision Plan*.

3. The lift station(s) included in a lift station report must serve multiple units or equivalents consistent with Water Quality Control Division policy.

The minimum planning information to be included in a lift station report necessary for regional review is summarized below. Any changes to eliminate information must be accepted by the local management agency and DRCOG staff through a pre-planning meeting process. A modified checklist must be included with these alternate lift station reports.

1. Executive Summary (Stand alone 1-page summary that can be used in agendas).
2. Contact list that includes owner, engineer, management agency and any other contact that needs to be notified of issue, concerns and approval.
3. Introduction and general planning information, which summarizes, as a minimum, the following topics:
  - Background and history
  - Wastewater service provider (operating agency)
  - Management agency
  - Notice of approval by management agency
  - Ownership of lift station
  - Operational agreements and/or management plans
  - Financial responsibility
  - Lift station location (general site location map)
4. Lift Station Characterization
5. Detailed map showing current service area of lift station, wastewater provider service area (WUSA and CWP Planning Area) and lift station planning area, if appropriate (e.g. anticipated service area 25 years in future or longer), and relationship to collection system. Good quality maps are necessary that provide all requested information. Failure to provide adequate maps will stop the review process.
6. Description of current and anticipated future population, employment and wastewater flow (2020, 2025 or build-out). Remember to use DRCOG conformity data sets, with information obtainable from the DRCOG Resource Center.
  - By lift station sanitary sewer service area

- Treatment plant(s) capacity and staging
7. Lift station design and features.
    - Lift station capacity and design
    - Lift station sizing (average and peak) and staging
    - Odor control or aesthetic considerations
    - Program for repair/replacement of lift station infrastructure
    - Construction schedule and timing
    - Any issues that affect construction
    - Emergency response and spill prevention
  8. Wasteload Allocation Characterization (Short-listing of any appropriate wasteload allocations or total maximum daily load requirements at the point of discharge. The management agency can provide this information or cite the source of information in the accepted wastewater utility plan for the associated treatment plant.)
  9. Management Structure and Financial Plans
  10. Technical Support Appendices
    - Summary of legal description and evidence of site ownership.
    - Site characterization report (see Utility Plan Guidance for copy of site approval regulations that list site characterization report requirements).
    - Planning and zoning support information.
    - Any appropriate agreements.
    - Letter of approval from management agency and/or Operating agency.
    - Design data or information, as appropriate from manufacturer.

## **Review process**

The review process has three distinct steps: Local management agency; regional planning agency (DRCOG); and the state review process through the Colorado Department of Public Health and Environment Water Quality Control Division. The lift station report is subject to a full regional review process, which includes the utility review team and the WEPC. Remember to allow time for the review process at the local management level, for regional review and for the WQCD process, which follows the regional process. This complete review process can take three to five months.

## **Distribution and number of copies**

Copies of lift station reports, with associated maps and requested documents, will be provided to DRCOG for distribution to the Wastewater Utility Plan Review Team. The total number of copies can vary, depending on the lift station report area (Table 6). Additional copies may be requested on an as needed basis.

After all approval and required amendments, the applicant must provide three copies of all final documents that are defined as the lift station report to DRCOG for distribution to the WQCD to accompany the acceptance or conditional acceptance letter from DRCOG. Applicants are responsible for obtaining all necessary signatures on the site approval form with original signatures provided to WQCD. DRCOG requires signed site approval forms to complete the regional review process. DRCOG will retain one lift station report as a permanent record. The applicant is responsible for distributing copies to the management agency. DRCOG is responsible for the distribution of copies for the review and acceptance process.

**Table 6      Review and final copy distribution**

<b>Review Process</b>	<b>Complete Set of Documents</b>
Local Management Agency	
Management Agency	Varies (case-by-case basis)
Adjacent Cities, Towns or Counties	Varies (case-by-case basis)
Local Health Department	1 (Required for Review)
Regional Review Process	
DRCOG Staff	1 (Required for Review)
WEPC Wastewater Utility Review Team	10 (Required for Review)
Other Sign-off Agencies	Varies (maximum 4)
Accepted Final Copy	Complete Set of Documents
WQCD	1 (Required for Submittal to WQCD)
DRCOG Permanent Record	1

**Required checklist**

The outline of chapters to be included in the lift station report is shown in Table 7. A lift station report can be done using a different format provided that the new structure is explained in the document introduction and pre-approved by the management agency and DRCOG staff through a pre-planning process. The wastewater utility review team members are volunteers from WEPC who desire a smooth and timely review process. Consistency in documentation preparation can help expedite the review process.

The applicant and management agency should use the checklist for their review processes. The Wastewater Utility Review Team will use the checklist to assess the completeness of the lift station report. If a topic area is viewed as not relevant, the lift station report should explain why the element is not relevant. The review process and planning elements are designed to be flexible, but simply using the term “not applicable” is not sufficient justification not to address a category area. Case-by-case

considerations will be made through the pre-planning process.

**Table 7 Lift Station Checklist**

Chapter	Includes	Page
I. Executive Summary		
II. Introduction and General Planning	Background & History (elements include but are not limited to: associated utility plan or schedule of completion, wastewater provider, need statement, ownership statement, list agreements, financial responsibility, statement on involvement of management agency and local planning department)	
	Implementation Schedule & Timing Issues	
III. Lift Station Characterization	Service Area Designations WUSA & CWP Planning Areas	
	Population & Employment Datasets & Associated Forecasts	
	Wastewater Flow Projections	
	Sizing and Staging	
	Lift Station Design and Features	
	Odor Control and Aesthetic Considerations	
	Site Characterization Report Summary	
	Maps (Required)	
	Service Areas (WUSA and CWP Planning)	
	Lift Station location related to collection system	
	Description of programs for repair/replacement of lift station infrastructure; and emergency response or spill prevention processes	
IV. Wasteload Allocations	List any TMDLs and/or Wasteload Allocations that apply to the point of discharge of the associated wastewater treatment plant or as listed in an accepted Wastewater Utility Plan (if applicable)	
V. Management & Financial Plans	Management Structure & Agreements	
	Financial Management Structure	
VI. Technical Support Appendices	Legal Description & Evidence of Site Ownership	
	Site Characterization Report	
	Planning & Zoning Information (e.g., Portion of Local Comprehensive Plan)	
	Agreements	
	Odor Control Studies or Plans	
	Manufacturers Lift Station Information	
	Letters of approval from Management Agency and Operating Agency	

## **XI. INTERCEPTOR AND COLLECTION SYSTEM REPORT**

### **Definition of Interceptor**

"INTERCEPTOR SEWER" - a sewer line will be considered as an interceptor sewer if it

has an internal pipe diameter equal to or greater than 24 inches and it meets one or more of the following criteria:

- (a) It intercepts domestic wastewater from a final point in a collection system and conveys such waste directly to a treatment plant, the interceptor sewer may also collect wastes from limited numbers (fewer than 5 connections per mile of sewer) of building services and sewer laterals along its route to the wastewater treatment plant;
- (b) It serves in place of a treatment plant and transports the collected domestic wastes to an adjoining collection system or interceptor sewer for treatment;
- (c) It transports the domestic wastes from one or more municipal collection systems to another municipality or to a regional treatment plant;
- (d) It intercepts an existing major discharge of raw or inadequately treated wastewater for transport directly to another interceptor or to a treatment plant.

### **Report guidance**

This interceptor and collection system guidance is extracted from the *Wastewater Utility Plan Guidance* document (DRCOG 2002), which still takes precedence as the guidance document. The policy direction is contained within the *Metro Vision 2020 Clean Water Plan*. The interceptor and collection system report supports documentation contained within a wastewater utility plan and can be a separate component of a wastewater utility plan. Information provided within an interceptor and collection system report must be consistent with the *Wastewater Utility Plan Guidance* and policies contained within the *Metro Vision Plan* and the *Metro Vision 2020 Clean Water Plan*.

An interceptor and collection system report without an associated accepted wastewater utility plan must be a comprehensive document, while those interceptor and collection system reports associated with a separate accepted utility plan for the associated wastewater treatment facility will only provide specific details needed for permitting and reference the remaining checklist in the accepted wastewater utility plan. An interceptor and collection system report that references an accepted utility plan must identify the page location within the utility plan where the specific information can be found.

An interceptor and collection system report is sufficient for submittal and approval by the Water and Environmental Planning Committee (WEPC) as a component of a wastewater utility plan for use in the site approval process. An interceptor and collection system report can precede acceptance of a wastewater utility plan as a separate document for future incorporation into a final wastewater utility plan, if it meets the following criteria:

1. The operating agency, as designated in the *Metro Vision 2020 Clean Water Plan*,

agrees by letter to incorporate by reference or entirety the interceptor and collection system report into a final wastewater utility plan and agrees that the planning information provided is correct and consistent with the future utility plan. The operating agency must confirm by letter that the treatment works has the capacity to treat flows generated by the interceptor and collection system when fully developed as listed in site application. The management agency, if different from the operating agency, must also support by letter the interceptor and collection system report.

2. Interceptor and collection system(s) will serve an area entirely within the current urban growth boundary/area as shown in the *Metro Vision Plan*. Any modification to the urban growth boundary/area is a local government process. This action must proceed before there is any review consideration of an interceptor and collection system report through the regional utility plan review process, including acceptance by the designated management agency. Service area or urban growth boundary/area conflicts can be referred to the DRCOG Board of Director for action. The Interceptor and collection system Report must demonstrate consistency with the *Metro Vision Plan*. The WEPC will not resolve service area conflicts. However, the WEPC will not accept an Interceptor and collection system Report that is inconsistent with the *Metro Vision Plan*.
3. The interceptor and collection system(s) included in an interceptor and collection system report must serve multiple units or equivalents consistent with Water Quality Control Division policy.

The minimum planning information to be included in a collection system or interceptor report is summarized below. Any changes to eliminate information must be accepted by the management agency and DRCOG staff through a pre-planning meeting process.

- Executive Summary (stand alone 1-page summary that can be used in agendas)
- Introduction and general planning information, which summarizes, as a minimum, the following topics
  - √ Background and history
  - √ Wastewater service provider (operating agency)
  - √ Management agency
    1. Notice of approval by management agency
    2. Ownership of collection system or interceptor
    3. Operational agreements and/or management plans
    4. Financial responsibility
  - √ Collection system or interceptor map (s) (includes locator map and layout map)
- Collection System or Interceptor Characterization
  - √ Detailed map showing current service area of collection system or interceptor, wastewater provider service area (WUSA and CWP planning Area) and collection system or interceptor planning area, if appropriate (e.g.



DRCOG for distribution to the WQCD to accompany the acceptance or conditional acceptance letter from DRCOG. Applicants are responsible for obtaining all necessary signatures on the site approval form with original signatures provided to WQCD. DRCOG requires signed site approval forms to complete the regional review process. DRCOG will retain one interceptor and collection system report as a permanent record. The applicant is responsible for distributing copies to the management agency. DRCOG distributes of copies for the review and acceptance process.

**Table 8 Review and final copy distribution**

<b>Review Process</b>	<b>Complete Set of Documents</b>
Local Management Agency	
Management Agency	Varies (case-by-case basis)
Adjacent Cities, Towns or Counties	Varies (case-by-case basis)
Local Health Department	1 (Required for Review)
Regional Review Process	
DRCOG Staff	1 (Required for Review)
WEPC Wastewater Utility Review Team	10 (Required for Review)
Other Sign-off Agencies	Varies (maximum 4)
Accepted Final Copy	Complete Set of Documents
WQCD	1 (Required for Submittal to WQCD)
DRCOG Permanent Record	1 (Required for Submittal to WQCD)

**Required checklist**

The outline of chapters to be included in the interceptor and collection system report is shown in Table 2. An interceptor and collection system report can be done using a different format provided that the new structure is explained in the document introduction and pre-approved by the management agency and DRCOG staff through a pre-planning process. The wastewater utility review team members are volunteers from WEPC who desire a smooth and timely review process. Consistency in documentation preparation can help expedite the review process.

The applicant and management agency should use the checklist for their review processes. The Wastewater Utility Review Team will use the checklist to assess the completeness of the interceptor and collection system report. If a topic area is viewed as not relevant, the interceptor and collection system report should explain why the element is not relevant. The review process and planning elements are designed to be flexible, but simply using the term “not applicable” is not sufficient justification not to address a category area. Case-by-case considerations will be made through the pre-planning process.

**Table 9 Collection system or interceptor checklist**

Chapter	Includes	Pages
I. Executive Summary		
II. Introduction and General Planning	Background & History (elements include but are not limited to: associated utility plan or schedule of completion, wastewater provider, need statement, ownership statement, list agreements, financial responsibility, statement on involvement of management agency and local planning department)	
	Implementation Schedule & Timing Issues	
III. Collection System or Interceptor Characterization	Service Area Designations WUSA & CWP Planning Areas	
	Population & Employment Datasets & Associated Forecasts	
	Wastewater Flow Projections	
	Sizing and Staging	
	Collection System or Interceptor Design and Features	
	Maps (Required)	
	Service Areas (WUSA and CWP Planning)	
	Collection System or Interceptor System	
	Description of Program for Repair/Replacement of Interceptor and Collection System Infrastructure	
	Emergency Response and Spill Prevention	
IV. Environmental Concerns	List any appropriate environmental concerns associated with the right-a-way	
V. Management & Financial Plans	Management Structure & Agreements	
	Financial Management Structure	
VI. Technical Support Appendices	Legal Description & Evidence Of Collection System Or Interceptor Ownership, if appropriate	
	Planning & Zoning Information (e.g., Local Comprehensive Plan)	
	Agreements	
	Letters of Approval from Management Agency and/or Operating Agency Accepting Flow	

## **XII. REPORT ON WASTEWATER UTILITY PLAN REQUIREMENTS FOR NON-GROWTH OR LOW-GROWTH AREAS**

There are some communities where preparation of a full wastewater utility plan is not necessary because the area has existing wastewater facilities (treatment plant, interceptors, and/or lift stations) sufficient to serve its current and future anticipated service area/population (10 years). For these areas a wastewater utility report as described below will be sufficient for submittal and approval as a wastewater utility plan. These wastewater utility reports may be submitted in letter format (with attachments) or as reports. As with wastewater utility plans, these wastewater utility reports should be reviewed every five years.

1. Map showing current service area and planning area (e.g., anticipated service area

20 years in future or longer).

2. Description of current wastewater facilities and capacity (site approval definitions)
  - Treatment Plant(s)
  - Lift Station(s)
  - Interceptors (24" or larger)
3. Description of current and anticipated future population and wastewater flow
  - Treatment Plant(s)
  - Lift Station(s)
  - Interceptors (24" or larger)
4. Certification of 10-year capacity for each listed facility
  - Treatment Plant(s)
  - Lift Station(s)
  - Interceptors (24" or larger)
5. Description of program for repair/replacement of existing facilities

### **XIII. GENERAL REVIEW PROCESS**

The *Clean Water Plan* consistency requirements are outlined in the *Metro Vision Plan*. An assessment or consistency determination is made by DRCOG and/or the local general purpose planning agency(ies) before (or concurrently with) WEPC consideration of the *Clean Water Plan* wastewater elements (a site approval, a utility plan, and/or a *Clean Water Plan* amendment). A general review process is listed in Table 10.

**Table 10 Utility plan preparation and review steps**

<b>Steps</b>	<b>Action</b>	<b>Involved Agency/Entity</b>
1. Preliminary concept	Review concept with management agency	Applicant & Management agency
2. Land use review	Consistency with urban growth boundary/area	Applicant & Local government responsible for comprehensive plan
3. Pre-plan meeting	A pre-plan preparation review meeting; service area and Clean Water Plan consistency	Appropriate planning agency, management agency & DRCOG
4. Utility plan local review	Management agency acceptance and local health department review	Applicant & Management agency; local health department
5. Management agency forwards to DRCOG	Require designated water quality management agency forward by letter 12 copies of any wastewater utility plan, lift station report or site approval with required documentation for regional	Management agency & DRCOG

Steps	Action	Involved Agency/Entity
	review	
6. Initiate regional review	Notification forms and forward copies to wastewater utility team	DRCOG
7. Wastewater Utility Plan Review Team	Review using guidance document and notify applicant of any missing elements	WURT, appropriate local governments & agencies, WQCD or district engineer & DRCOG
8. Urban growth boundary/area concurrence review	Concurrence on service area and/or land use issues	WURT, DRCOG staff and WEPC
9. Wastewater Utility Plan Review Team recommendation	Develop recommendation and set WEPC action date	WURT & DRCOG staff
10. WEPC review	Acceptance, conditional acceptance or rejection of utility plan (rejected plans returned to management agency for action)	WEPC
11. Forward to WQCD	Letter to WQCD with final copy of all accepted or conditionally accepted documents	DRCOG

The threshold planning and consistency questions to be answered prior to WEPC review of utility plans, requests for site approval, and/or *Clean Water Plan* amendment requests are:

1. Has the responsible point source management agency approved the proposal in writing? (Note: forwarding the utility plan or site approval without the formal recommendation of the point source management agency does not meet the intent of the CWP and the Utility Plan Guidance. WEPC cannot consider a utility plan until it is recommended by the point source management agency responsible for wastewater utility planning.)
2. Does the proposal require DRCOG Board approval of an amendment to the *Metro Vision Plan* or can the proposal proceed with WEPC approval of a Utility Plan and/or Site Approval?
3. Is the area to be served before 2020 and does the type of development require the service area to be within the urban growth boundary/area as determined by the appropriate local government in concurrence with DRCOG staff? If the initial service area is subject to the urban growth boundary/area requirements, is it within the current urban service boundaries? (Note: If the service area is not subject to the urban growth boundary/area or is already included in the urban growth boundary/area, then WEPC can proceed.)
4. Are there any overlaps of assigned or claimed wastewater planning areas in the

area of the proposed utility plan? [Note: If overlaps exist, then the question of responsibility for urban wastewater utility planning must be resolved by WEPC and potentially the DRCOG Board before WEPC takes action on a utility plan. If there are no planning area overlaps, then WEPC consideration of the utility plan may proceed [provided the service area is consistent with the applicable comprehensive plan(s)].

5. Is the service area identified in the utility plan consistent with the comprehensive plan(s) of the general-purpose governments as evidenced by written concurrence by those general-purpose governments? (Note: If the utility plan is not consistent with the comprehensive plan(s) or a similar document adopted by the general-purpose government(s), the utility plan should not be considered by WEPC.)

### **Utility plan and site approval notification guidance**

This guidance identifies two sets of entities that need to be notified of pending wastewater utility plan review and/or site approval actions:

1. Those entities who should be notified that the *Utility Plan Review Team* of the Water and Environmental Planning Committee (WEPC) has begun review of a wastewater utility plan and when WEPC will consider action on the wastewater utility plan; and
2. Those entities that should be notified when DRCOG begins processing a site approval based on an accepted or conditionally accepted wastewater utility plan.

The entities identified in the site approval process that have an opportunity to sign-off on the application are expected to be signatories. Signature agencies include the management agency, city or county where facilities are sited, treatment agency, local health agency and DRCOG as the planning agency. In addition to requested signatures, a number of entities may show an interest in the wastewater utility plan for a specific service area.

The Colorado *Site Approval Notification Form* requires a set of entities be notified before DRCOG takes action on a site approval for consistency with an accepted or conditionally accepted wastewater utility plan. The following guidance will be used to identify those entities that should receive a notification letter and be kept on record in the *Site Approval Notification Checklist*.

- 1) Adjacent General Purpose Governments
  - a) For new or expanded treatment works - all general-purpose governments (city or county) within a three-mile radius of treatment plant.
  - b) For new or expanded lift station - all general-purpose governments within a one-mile radius of the lift station and three miles downstream.

- 2) Downstream Surface Water Diverters – all surface water diverters within five miles downstream from site (plant or lift station) (notification restricted to owners of the diversion headworks)
- 3) If TMDL and/or 303(d) listed stream segment – all publicly owned treatment works dischargers and appropriate industrial or general permit dischargers on stream segment
- 4) Public Notice
  - a) Local newspaper for wastewater utility plan
  - b) DRCOG Regional Report
  - c) WEPC Agenda

**Management agency letter for regional review**

The designated water quality management agency must recommend approval of, by letter, any wastewater utility plan before review by the Utility Review Team. The review process will not start without the management agency’s written support. The applicant is responsible for obtaining permission from the management agency to begin the review process.

**Public participation process**

Public participation is an integral part of water quality management in the DRCOG region. An opportunity for public input should be provided through informational hearings or public meetings. Local governments and regional water quality planning agencies are required to provide opportunities for public input into their deliberations regarding water quality issues, including acceptance of wastewater utility plans. All meetings of the WEPC are open to the public. An important aspect of the increasing trend toward a watershed protection approach is assuring a full opportunity for stakeholder input into and participation in watershed planning and management activities. Consequently, utility plans should carefully document all opportunities that were provided for public participation or comment.

**XIV. UTILITY PLAN ACCEPTANCE POLICY**

**General criteria**

**Only accepted and conditionally accepted utility plans will be referenced in the *Metro Vision 2020 Clean Water Plan*.**

Accepted and conditionally accepted utility plans will be referenced in the *Clean Water Plan* and these plans will represent the preferred wastewater management strategy for the wastewater utility service area and the CWP planning area. Accepted and conditionally accepted utility plans will be used in the site approval process, as *Clean Water Plan*

amendments and to meet other appropriate regulatory requirements.

Utility plans or a set of utility plan documents can be submitted to WEPC at any time after review and approval by the appropriate management agency. WEPC will not modify a utility plan or set of utility plans. WEPC will take formal action on presented documents within a maximum three-month period. WEPC can make one of the following three recommendations related to utility plan acceptance:

- ❑ Accept;
- ❑ Conditional accept with the conditions listed; or
- ❑ Refer back to the submitting agency or the designated management agency for additional actions, analyses or information.

**The DRCOG Water and Environmental Planning Committee (WEPC) will maintain a utility plan review team.**

A utility plan review team is established from WEPC members and alternates. The review team has eight to 10 participants. Participation on the review team is confirmed by WEPC action. Review team membership can be altered as needed to facilitate reviews. The review team has a rotating membership. The review team checks the utility plan or set of utility plans for consistency with adopted policy and minimum requirements. The review team summarizes findings for WEPC at a regularly scheduled meeting.

The review team may distribute copies of the utility plan or set of utility plans to those jurisdictions that traditionally will sign the site approval form. These signature entities may be requested to comment, if appropriate, at the same WEPC meeting that the review team summarizes its findings.

### **Renewal frequency**

The review and acceptance frequency for wastewater utility plans is five years after the initial acceptance by WEPC. Although this time frame corresponds to the permit renewal period, review does not necessarily need to coincide with permit renewal. A utility plan that has not been reviewed after six years will be flagged as such in the technical appendices to the *Clean Water Plan* and will not be used in the site approval process. Any significant changes in a local comprehensive plan should trigger a local review of the wastewater utility plan and, if needed, a revision of the utility plan.

### **Acceptance procedure**

The following procedure will apply to the WEPC review and acceptance.

- ❑ Appropriate set of utility plan(s) delivered to DRCOG, other appropriate sign-off agencies and reported to WEPC.

- DRCOG staff distributes review copies to team members.
- Meeting scheduled within 45 days of distribution to review final utility plan with review team members and other interested agencies. Other interested agencies will be requested to identify any issues or concerns prior to this review meeting (generally a 30-day response time).
- At the review meeting, the review team will mark-off a checklist of minimum requirements, assure that there are no overlapping service areas, review assumptions and provide any appropriate comments.
- Based on the review team comments and comments from other interested agencies, DRCOG staff may prepare an informal written response and/or recommendation for inclusion in the following WEPC meeting agenda.
- WEPC and other appropriate agencies acknowledge acceptance, conditional acceptance or refer back the utility plan at the WEPC meeting. Based on the action, the appropriate sign off forms will be filled out following the meeting.

### Documentation sign-off

**Applicant is responsible for obtaining signatures consistent with the site approval regulation 22.**

The site approval process identifies a list of agencies who are given an opportunity to make a recommendation on an application for construction of new, modified or expanded domestic wastewater treatment plants (Table 7). Until a memorandum of understanding can be

established between DRCOG and the WQCD, the utility plan applicant is responsible for obtaining signatures consistent with the site approval regulation 22. The signed site approval is considered a part of the final utility plan that is submitted to the WQCD by DRCOG.

Those agencies identified in the site approval process signoff on all *final utility plans* reviewed and accepted by WEPC. As appropriate, these signature agencies will also have the opportunity to attach and file any comments with their signature. Original sign-off forms will be kept on file at DRCOG and the Water Quality Control Division as part of a site approval process or for other document processing.

WEPC will sign-off on *final utility plans* using a separate form entitled *Water Resource Management Advisory Committee Acceptance or Conditional Acceptance Form* (Table 12). Original sign-off forms will be kept on file at DRCOG and the Water Quality Control Division as part of a site approval process or for other document processing.

**Table 11 Acceptance or conditional acceptance form**

**WATER AND ENVIRONMENTAL PLANNING COMMITTEE  
WASTEWATER UTILITY PLAN  
Acceptance or Conditional Acceptance Form**

(Original sign-off forms kept on file at the Denver Regional Council of Governments and the Colorado Department of Public Health and Environment Water Quality Control Division as part of a site approval process or for other document processing).

Utility Plan Document(s):            {Report title(s), date, prepared by}  
Prepared for:                            {Operating or management agency}

Wastewater Treatment Facility:    {Name of treatment works as shown in permit}

Management Agency:                {Recognized management agency}  
Operating Agency:                    {if different from management agency}

Acceptance Date:                     {WEPC review date}

Utility Plan Action (circle):        Accepted                    Conditional Acceptance

Motion:                                {List actual motion including conditional acceptance requirements used by WEPC}

**The Denver Regional Council of Governments through its Water and Environmental Planning Committee certifies that the above referenced wastewater utility plan was reviewed by WEPC in accordance with the *Metro Vision Plan Utility Plan Guidance*, conforms to the policies contained in the *Metro Vision 2020 Clean Water Plan* and was accepted (or conditionally accepted) as a wastewater utility plan.**

WEPC Chair or Vice Chair	Date
Denver Regional Council of Governments	Date

**XV. REFERENCES**

Denver Regional Council of Governments. 1998. *Metro Vision 2020 Clean Water Plan Policies, Assessments and Management Programs*. Denver Regional Council of Governments, 185p.

Denver Regional Council of Governments. 1997. *Metro Vision Plan*. Denver Regional Council of Governments, 58p.

**XVI. APPENDICES**

**Appendix A – Regulations for the Site Application Process**

**COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT**

**REGULATION NO. 22**

**REGULATIONS FOR THE SITE APPLICATION PROCESS**

**ADOPTED: November 17, 1981**  
**EFFECTIVE: December 30, 1981**  
**AMENDED: May 13, 1996**  
**EFFECTIVE: June 30, 1996**  
**AMENDED: July 14, 1997**  
**EFFECTIVE: August 30, 1997**  
**AMENDED: March 10, 1998**  
**EFFECTIVE: April 30, 1998.**

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**REGULATION NO. 22**  
**REGULATIONS FOR THE SITE APPROVAL PROCESS**

**22.1 AUTHORITY**

Sections 25-8-202 (1) (e); 25-8-202 (1)(i) and (2); 25-8-702 C.R.S.

**22.2 DEFINITIONS**

- (1) "APPLICATION" means the combined materials necessary to fulfill the requirements of section 22.4 or 22.5 or 22.6 as appropriate. This may include the appropriate application form, engineering report, review agency recommendations and certifications.
- (2) "APPROVAL" means the final action of the Water Quality Control Division on an application for site approval or certification. This action may take the form of an approval, conditional approval, or denial of the application.
- (3) "COMMISSION" means the Water Quality Control Commission created by section 25-8-201, C.R.S.
- (4) "CONSTRUCTION" means entering into a contract for the erection or physical placement of materials, equipment, piping, earthwork, or buildings which are to be part of a domestic wastewater treatment works.
- (5) "DESIGN CAPACITY" means the rated capacity (capability of a treatment plant to meet effluent limitations). This rated capacity shall be given in gallons per day (MGD) and organic loading in pounds per day. This rated capacity can be expressed as: (a) annual average; (b) maximum monthly average; or (c) another capacity measure certified by the Division as appropriate for the treatment plant.
- (6) "DIVISION" means the Division of Administration, Colorado Department of Public Health and Environment.
- (7) "DOMESTIC WASTEWATER" means a combination of liquid wastes which may include chemicals, household wastes, human excreta, animal or vegetable matter in suspension or solution.
- (8) "DOMESTIC WASTEWATER TREATMENT PLANT" (TREATMENT PLANT) means an arrangement of devices and structures for treating, neutralizing, stabilizing, or disposing of domestic wastewater, industrial wastes, and biosolids. The term "domestic wastewater treatment plant" does not include industrial wastewater treatment plants or complexes whose primary function is the treatment of industrial wastes, notwithstanding the fact that human wastes generated incidentally to the industrial process are treated therein.
- (9) "DOMESTIC WASTEWATER TREATMENT WORKS" (TREATMENT WORKS) means a treatment plant or facility for treating, neutralizing, stabilizing, or disposing of domestic wastewater which system or facility has a designed capacity to receive more than two thousand gallons of domestic wastewater per day. The term "domestic wastewater treatment works" also includes appurtenances to such system or facility such as vaults, outfall sewers, interceptor sewers and pumping stations and to equipment related to

such appurtenances. The term "domestic wastewater treatment works" does not include industrial wastewater treatment plants or complexes whose primary function is the treatment of industrial wastes, notwithstanding the fact that human wastes generated incidentally to the industrial process are treated therein.

- (10) "EXPANSION" means any "construction" which increases the design capacity of any facility meeting the definition of "domestic wastewater treatment works" which would involve increased organic or hydraulic loading to the sewage treatment plant. It does not mean the replacement in kind of facilities or equipment which would be considered ordinary maintenance. If a modification or replacement does not increase design capacity of the domestic wastewater treatment works, it is not an expansion.
- (11) "GPD" (gallons per day) or "MGD" (million gallons per day) means the total estimated or measured liquid waste flow during any twenty-four hour period to a domestic wastewater treatment works.
- (12) "INTERCEPTOR SEWER" - a sewer line will be considered as an interceptor sewer if it has an internal pipe diameter equal to or greater than 24 inches and it meets one or more of the following criteria:
  - (a) It intercepts domestic wastewater from a final point in a collection system and conveys such waste directly to a treatment plant, the interceptor sewer may also collect wastes from limited numbers (fewer than 5 connections per mile of sewer) of building services and sewer laterals along its route to the wastewater treatment plant;
  - (e) It serves in place of a treatment plant and transports the collected domestic wastes to an adjoining collection system or interceptor sewer for treatment;
  - (f) It transports the domestic wastes from one or more municipal collection systems to another municipality or to a regional treatment plant;
  - (g) it intercepts an existing major discharge of raw or inadequately treated wastewater for transport directly to another interceptor or to a treatment plant.
- (13) "LIFT STATION" (PUMPING STATION) means a wastewater pumping station that pumps the wastewater to a different point when the continuance of the sewer at reasonable slopes would involve excessive depths of bury or that pumps wastewater from areas too low to drain into available sewers. This definition of lift station does not include wastewater pumping stations for single family residences or clusters of five or fewer single family residences.
- (14) "MANAGEMENT AGENCY" means a municipality, appropriately designated by the governor, in accordance with Section 208 of the Federal Clean Water Act and State Law, with responsibilities to implement all or part of an approved water quality management plan
- (15) "MUNICIPALITY" means any regional commission, county, metropolitan district offering sanitation service, sanitation district, water and sanitation district, water conservancy district, metropolitan sewage disposal district, service authority, city and county, city, town, Indian tribe or authorized Indian tribal organization or any two or more of them

which are acting jointly in connection with a domestic wastewater treatment works.

- (16) "OUTFALL SEWER" means a sewer that receives treated wastewater from a treatment plant and carries it to a point of final discharge.
- (17) "PERSON" means an individual, corporation, partnership, association, state, or political subdivision thereof, federal agency, state agency, municipality, commission or interstate body.
- (18) "PLANNING AGENCY" means an entity appropriately designated by the Governor, in accordance with section 208 of The Federal Clean Water Act and State Law, to produce and update a water quality management plan.
- (19) "STATE WATERS" means any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works or disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.
- (20) "TREATMENT ENTITY" means a "municipality" responsible for treating the domestic wastewater.
- (21) "VAULT" means a receptacle, which is designed to receive and store domestic wastewater either from a sewer or from a privy and is accessible for the periodic removal of its contents. If designed to accept a flow greater than two thousand gallons of domestic wastewater per day, the vault shall be deemed to be a treatment works.
- (22) "WATERCOURSE" means the natural or humanmade channels or ditch or conveyance or standing body of water into which the effluent from a domestic wastewater treatment works is discharged and does not necessarily contain water at all times.
- (23) "WATER QUALITY MANAGEMENT PLAN" consists of wastewater management and water quality plans produced in accordance with sections 208 and 303(e) of the federal Clean Water Act and state law, and certified and approved updates to that plan. A water quality management plan must identify a system of treatment plants necessary to meet the anticipated municipal and industrial waste treatment needs of the designated area over a 20-year period.

## 22.3 DECLARATION OF POLICY FOR CONSTRUCTION OR EXPANSION OF DOMESTIC WASTEWATER TREATMENT WORKS

- (1) In evaluating the suitability of a proposal to construct or expand a domestic wastewater treatment works, the Division shall:
  - (a) consider the local long-range comprehensive plan for the area as it effects water quality and any approved water quality management plan;
  - (b) determine that the proposed domestic wastewater treatment works can be managed to minimize the potential adverse impact on water quality and in accordance with the appropriately issued discharge permit, where applicable; and
  - (c) encourage the consolidation of wastewater treatment works whenever feasible with consideration for such issues as water conservation, water rights utilization, stream flow, water quality, and economics.
  
- (2) Each site application for domestic wastewater treatment works shall be reviewed to insure:
  - (a) that the existing treatment works is not overloaded when connecting new lift stations or interceptors subject to site application requirements of 22.6
  - (b) that the proposed treatment works is developed considering the local long-range comprehensive plan for the area as it affects water quality and the approved water quality management plan(s) for the area;
  - (c) that the proposed treatment works can protect water supplies by meeting its discharge permit (where applicable) which is based on water quality standards and/or appropriate waste load allocation;
  - (d) that the proposed treatment works has been properly reviewed by all appropriate local, state, and federal government agencies and planning agencies;
  - (e) that the proposed location will have no foreseeable adverse effects on the public health, welfare, and safety;
  - (f) that the applicant is capable of providing for adequate operational management, including legal authority and financial capabilities, to meet its proposed effluent limitations, where applicable, and minimize potential adverse impacts on water quality on a long-term basis;
  - (g) that the proposed treatment works be so located that it is not unnecessarily endangered by natural hazards; and
  - (h) that the objectives of other water quality regulations will not be adversely affected.
  
- (3) In addition to approval of the site application, the applicant must obtain approval of the design of the treatment works from the Division through a review of the plans and specifications prior to beginning construction.

- (4) The applicant's professional engineer, registered to practice in the State of Colorado must certify at the completion of construction that the treatment works was constructed according to plans, specifications, and significant amendments thereto approved by the Division. Significant amendments are considered those which change the treatment process, the capacity of the treatment works or the ability to operate the treatment works.
- (5) In the interest of facilitating a more effective and timely review of individual applications, counties, other local governments and planning agencies are encouraged to establish and implement a coordinated review and comment process.
- (6) In the interest of facilitating a more effective and timely review of proposed new and expanded domestic wastewater treatment works, each planning agency may establish and implement a coordinated review and comment process to carry out the provisions of this regulation in coordination with its water quality planning responsibilities. Where a planning agency wishes to establish such a coordinated process, the Division may enter into an agreement with the planning agency specifying the procedures for this coordinated process. The intent is to establish a single process 1) to meet these site approval requirements and 2) to meet the requirements for amendments to the water quality management plan. The process should be designed so that a new or expanded domestic wastewater treatment works which is approved as a part of the water quality management plan may be concurrently deemed to also meet the requirements of these site approval regulations at the time of its inclusion in the plan. Under such a coordinated process, the Division retains final authority for approval or denial of each project which is regulated under these site approval regulations.

#### **22.4 APPLICATION PROCEDURES FOR CONSTRUCTION OF NEW DOMESTIC WASTEWATER TREATMENT PLANTS**

- (1) The application for site approval of any new domestic wastewater treatment plant, shall be made to the Division on the proper form with recommended action by all applicable local authorities and planning agencies.
  - (a) These forms shall be available from the Water Quality Control Division, 4300 Cherry Creek Drive South, Denver, Colorado 80246 -1530.
  - (b) Accompanying the application shall be an adequate engineering report describing the proposed new domestic wastewater treatment plant and showing the applicant's capabilities to manage and operate the facility over the life of the project. The report shall be considered the culmination of the planning process and as a minimum shall address the following:
    - (i) Service area definition including existing and projected population , site location, staging or phasing, flow/loading projections, and relationship to other water and wastewater treatment plants in the area.
    - (ii) Proposed site location, evaluation of alternative sites, and evaluation of treatment alternatives.
    - (iii) Proposed effluent limitations as developed in coordination with the Division.

- (iv) Analysis of existing facilities within the service area(s).
- (v) Analysis of opportunities for consolidation of treatment works in accordance with the provisions of 22.3(1)(c), including those recommended in the water quality management plan, unless the approved water quality management plan recommends no consolidation.
- (vi) Evidence that the proposed site and facility operations will not be adversely effected by floodplain or other natural hazards. Where such hazards are identified at the selected site, the report shall describe means of mitigating the hazard.
- (vii) Evidence shall be presented in the form of a report, containing soils testing results and design recommendations and prepared by a Professional Geologist and a Geotechnical Engineer, or by a professional meeting the qualifications of both Professional Geologist and Geotechnical Engineer, with an appropriate level of experience investigating geologic hazards, stating that the site will support the proposed facility.
- (viii) Detailed description of selected alternatives including legal description of the site, treatment system description, design capacities, and operational staffing needs.
- (ix) Legal arrangements showing control of the site for the project life or showing the ability of the entity to acquire the site and use it for the project life. Approval by the Division of an application for site approval shall not be deemed to be a determination that the proposed treatment works is or is not necessary, that the proposed site is or is not the best or only site upon which to locate such a treatment works, or that location of a treatment works on the site is or is not a reasonable public use justifying condemnation of the site. Approval by the Division shall only be deemed to be a determination that the site application meets the requirements of this regulation 22 (5 CCR 1002-22).
- (x) Institutional arrangements such as contract and/or covenant terms which will be finalized to pay for acceptable waste treatment.
- (xi) Management capabilities for controlling the wastewater loading within the capacity limitations of the proposed treatment works, i.e., user contracts, operating agreements, pretreatment requirements and/or the management capabilities to expand the facilities as needed (subject to the appropriate, future review and approval procedures).
- (xii) Financial system which has been developed to provide for necessary capital and continued operation, maintenance, and replacement through the life of the project. This would include, for example, anticipated fee and rate structure.
- (xiii) Implementation plan and schedule including estimated construction time and estimated start-up date.

- (c) Where the site application indicates that a discharge to a ditch or other manmade conveyance structure is contemplated for the proposed plant, or that an easement, right-of-way or other access onto or across private property of another person may be necessary to construct the facility or to effectuate the discharge, the applicant shall furnish to the Division evidence that a notice of the intent to construct a new domestic wastewater treatment plant has been provided to the owner of such private property.
- (2) The applicant shall be responsible for submitting the application and engineering report described in section 22.4(1)(b) for the proposed new domestic wastewater treatment plant to all appropriate local governments, planning agencies and State agencies for review and comment prior to submission to the Division. After receipt of an application for site approval, each agency shall have a period of sixty (60) days in which to review and comment on the application and to make a recommendation to the Division. After that sixty (60) day period, the applicant may submit the application to the Division without such comments and/or recommendations. Upon receipt of any application lacking the comments or recommendation of an appropriate review entity, the Division shall contact that agency and provide a period of seven (7) days for the agency to provide comments and/or a recommendation or to explain the absence of such comments and/or recommendation. The review and commenting agencies shall include the following:
- (a) Management agency, if different from other entities listed below;
  - (b) County if the proposed facility is located in the unincorporated area of a county. The county, through its commissioners or its designee, is requested to review and comment upon the relationship of the treatment works to the local long-range comprehensive plan for the area as it affects water quality, proposed site location alternatives including the location with respect to the flood plain, and capacity to serve the planned development.
  - (c) City or Town if the proposed facility is to be located within the boundaries of a city or town or within three miles of those boundaries if the facility is to be located in an unincorporated area of the county. The city or town, through its mayor, council or its designee, is requested to review and comment upon the relationship of the treatment works to the local comprehensive plan and/or utility plan for the community as it affects water quality, proposed site location alternatives including the location with respect to the flood plain, and capacity to serve the planned development.
  - (d) Local Health Authority is requested to review and comment on local issues, policies and/or regulations related to public health safety and welfare as affected by the proposal;
  - (e) Water Quality Planning Agency, if designated or if such function has been delegated by the State, should comment on the consistency of the proposed treatment plant to the water quality management plan ; and
- (3) If the proposed facility will be on or adjacent to any land owned or managed by a state or federal agency, a copy of this application shall be sent to such agency.

- (4) The applicant must perform all necessary coordination and supply all information and obtain all necessary signoffs on the form before sending it to the Division
- (5) The burden is on the applicant to supply all information necessary for the Division to make an adequate review.
- (6) Unless posted in accordance with local permitting requirements, the following posting requirements apply to all new treatment plants:
  - (a) Signs are to be posted for 15 continuous days prior to the time the site application is submitted to the Division. However, the Division should be notified of the project at the time of posting so that necessary public information can be made available as required under (b) of this Section.
  - (b) The sign shall be not less than 3' x 4' on a post not less than 4' above the natural grade where allowable, or else in conformance with applicable county or municipal sign codes. Notice shall contain the following information:

NOTICE OF PROPOSED FACILITY (IDENTIFY)  
(Title must be 4" in red, or maximum allowable under sign code.)

Notice is hereby given that the property upon which this sign is posted shall be considered for the construction of a facility (identify) Additional information may be obtained by contacting the applicant (include applicant's phone number) or the Colorado Department of Public Health and Environment, Water Quality Control Division, (303) 692-3500.

**22.5 APPLICATION PROCEDURES FOR MODIFICATION AND EXPANSION OF EXISTING DOMESTIC WASTEWATER TREATMENT PLANTS**

- (1) The application for site approval for any modified and expanded domestic wastewater treatment plant shall be made to the Division on the proper form with recommended action by all applicable local authorities and the planning agency, subject to the provisions of 22.3(6). These forms shall be available from the Water Quality Control Division, 4300 Cherry Creek Drive South, Denver, Colorado, 80222-1530.
- (2) The treatment entity shall also provide an adequate engineering report which documents the need for the modifications and construction, consistency with local wastewater facility plans and any approved water quality management plans, and, as a minimum, shall address the following:
  - (a) Changes to existing service area, population and loading projections;
  - (b) Proposed additional or modified effluent limitations, as developed in coordination with the Division;
  - (c) Analysis of the performance of the existing treatment works;
  - (d) Analysis of alternative means to treat additional loading or accomplish necessary process modifications, in accordance with 22.3(1), including any consolidation alternatives recommended in the approved water quality management plan, if the plan recommends no consolidation, that option does not need to be considered;
  - (e) Changes in the financial system which will result from the proposed modification or expansion, including changes to the fee structure;
  - (f) Implementation plan and schedule, including estimated construction time and estimated date on which the modified or expanded plant will be in operation.
- (3) The Division may require that the applicant present evidence, in the form of a report, containing soils testing results and design recommendations and prepared by a Professional Geologist and a Geotechnical Engineer, or by a professional meeting the qualifications of both Professional Geologist and Geotechnical Engineer, with an appropriate level of experience investigating geologic hazards, stating that the site will support the proposed facility.
- (4) The treatment entity shall be responsible for submitting the application and engineering report described in section 22.5(2) for the modified or expanded domestic wastewater treatment works to all appropriate local governments, planning agencies, and state agencies for review and comment prior to submission to the Division. If after 60 days the agencies have not commented on an application, the treatment entity may submit the application to the Division without such comments. In accordance with the roles and responsibilities described in 22.4 (2)(b-e), the review and comment agencies shall include the following:
  - (a) Management agency if different from other entities listed below;
  - (b) County if the treatment plant is located in the unincorporated area of the county;

- (c) City or town if the treatment plant is located within the boundaries of the city or town;
- (d) Local health authority; and
- (e) Water Quality Planning Agency.

**22.5 APPLICATION AND CERTIFICATION PROCEDURES FOR LIFT STATIONS AND INTERCEPTORS**

- (1) Ninety days prior to the commencement of construction of an interceptor line, the person responsible for that line shall notify the planning agency and the Division of such construction. This notification shall be accompanied by a certification from the agency receiving the wastewater for treatment that it has, or will have, the capacity to treat the projected wastewater from that interceptor line in accordance with the treatment agency's site approval and discharge permit. Within 30 days of receipt of notification, the planning agency or the Division, if a planning agency does not exist, shall certify that the proposed interceptor line has the capacity to carry the projected flow and is consistent with the water quality management plan. In the event the interceptor line cannot be certified by the treatment agency and the planning agency, the person responsible shall be required to obtain approval from the Division, as set forth in section 22.6(2) of these regulations, prior to construction. For notification received pursuant to section 22.6(1), the Division shall acknowledge in writing, to the responsible person, the receipt of such notification and certification.
- (2) The application for site approval for interceptors not eligible for certification as provided for in section 22.6(1) and all lift stations shall consist of an adequate engineering report describing the proposed lift station and/or interceptor sewer and its potential impacts on the receiving domestic wastewater treatment plant. As a minimum, the report shall address the following:
  - (a) Name and address of the applicant;
  - (b) A map identifying the site of the proposed facilities, topography of the area, and neighboring land uses;
  - (c) Service area, including existing and projected population, and flow/loading projections;
  - (d) Identification of the treatment entity responsible for receiving and treating the wastewater;
  - (e) Legal arrangements showing control of the site or right-of-way for the project life or showing the ability of the entity to acquire the site or right-of-way and use it for the project life. Approval by the Division of an application for site approval shall not be deemed to be a determination that the proposed interceptor or lift station is or is not necessary, that the proposed site or right-of-way is or is not the best or only location for such an interceptor or lift station, or that the proposed location of an interceptor or right-of-way is or is not a reasonable public use justifying condemnation of the site. Approval by the Division shall only be deemed to be a

determination that the site application meets the requirements of this regulation 22 (5 CCR 1002-22);

- (f) Confirmation, in writing, from the wastewater treatment entity that it:
    - (i) Will treat the wastewater;
    - (ii) Is not presently receiving wastes in excess of its design capacity as defined in its site approval and/or discharge permit, or is under construction, or will be in a phased construction of new or expanded facilities, and will have necessary capacity completed and operational prior to the discharge from the new interceptor or from the new or expanded lift station;
    - (iii) Is not presently in violation of any effluent parameters of its discharge permit or operating under a Notice of Violation and/or Cease and Desist Order from the Division resulting from discharge permit violations;
  - (g) Evidence that the lift station and/or interceptor sewer will be operated and maintained by a responsible person, as defined herein, if the applicant is not the treatment entity; and
  - (h) Implementation plan and schedule including estimated construction time and estimated start-up date.
- (3) The application shall be forwarded to the city, town, or county planning agency in whose jurisdiction(s) the lift station and/or interceptor sewer is to be located. The applicant shall obtain from the appropriate local planning agency (agencies) a statement of consistency of the proposal with the local comprehensive plan(s) as they relate to water quality (subject to the provisions of 2.2.3(6)).
- (4) The application shall be forwarded to the water quality planning agency for the area in which the facilities are to be constructed and for the area to be served by those facilities. The applicant shall obtain from the appropriate planning agency (agencies) a statement of consistency of the proposal with any adopted water quality management plan(s).
- (5) For all applications meeting the above criteria, the Division will adopt the recommendation of the planning agency unless it is aware of potential adverse impacts from the project to water quality or the public health, safety or welfare not identified or addressed in the application.

## **22.7 APPLICATION PROCEDURES FOR AMENDMENT OF AN EXISTING SITE APPROVAL**

- (1) The application for amendment of an approved site application, and, where necessary, the discharge permit shall be made to the Division on the proper form with a list of all applicable local authorities and the planning agency to whom the amendment proposal has been provided. These forms shall be available from the Water Quality Control Division, 4300 Cherry Creek Drive South, Denver, Colorado, 80246-1530.
- (2) An amendment to the site approval and the discharge permit, where applicable, shall be

required for any of the following changes from conditions reflected in an approved site application or from conditions at a domestic wastewater treatment plant constructed prior to November 1967 and not expanded since that date:

- (a) The addition of a treatment process dealing with the liquid stream;
- (b) A change from the type of treatment process approved to a different process for dealing with the liquid stream;
- (c) A decrease or increase in the approved, rated hydraulic and/or organic treatment capacity of the treatment plant;
- (d) A change in the type of discharge employed; or
- (e) A change in the location of the discharge point, unless that change is within the same defined segment of the same receiving surface water.

## **22.8 CRITERIA FOR DIVISION OR COMMISSION DECISION MAKING**

- (1) The Division shall review the site application and engineering report, and in making its determination as to whether or not to approve or deny, shall consider a number of factors including:
  - (a) Designation of the legally responsible person and the legal description of the location;
  - (b) The existing domestic wastewater treatment facilities and feasibility (including the cost effectiveness, water quality management and local comprehensive plans, and legal, political and physical limitations) of treating wastes in an areawide facility;
  - (c) Relationship to and potential effect of proposed facility on any water supply intake;
  - (d) Location of proposed project to any flood plain or other natural hazard;
  - (e) Impact on public health, welfare, and safety;
  - (f) Proper notice;
  - (g) Review and comment of all required local government agencies and all planning agencies including recommendations for approval or disapproval with any conditions which should be a part of the Division approval;
  - (h) Long-range comprehensive planning for the area as it affects water quality;
  - (i) The water quality management plan for the area. The Division shall rely substantially upon such plan in deciding whether to grant site approval where the plan is current and comprehensive with respect to its analysis of population growth and distribution as it relates to wastewater treatment. In those areas where water quality management planning has not been conducted, or where

such planning is not current or comprehensive, the Division shall rely upon the factors (a) through (i) of this section and upon the information submitted in the application for site approval as the primary determinants in making the site application decision. Where portions of a water quality management plan are adopted as regulation, pursuant to §25-8-105(3)(a), they shall be binding on the site approval; and

- (j) The policies set forth in 22.3.
- (2) The Division will act expeditiously on all complete applications which have been submitted. The Division may require that the applicant ask for review and comments from other agencies (including the State Geologist regarding potential geologic hazards) for applications under sections 22.4, 22.5, and 22.6; however, the Division will make the final decision regarding approval or disapproval of the application.
- (3) If the application is denied, the Division will specify which items were not satisfied by the application and what measures the applicant may take, if any, to satisfy requirements.
- (4) All site approvals become effective on the date of approval and will expire one year from the date of approval, or on such other date as approved by the Division or the Commission. In the event of an appeal of the Division's action, the approval period will be stayed pending the outcome of the appeal before the Water Quality Control Commission. The date of a Commission ruling, upholding the Division's action, shall commence the one year approval period where applicable. Any project not commencing construction on or before the date of expiration must reapply or request a time extension. If there are no significant changes from the original application, this can be accomplished by a letter request.
- (5) Notice of the decision by the Division shall be included in the next Water Quality Information Bulletin.
- (6) Written notification of the Division's decision shall be sent to the applicant and all persons who have shown interest.
- (7) Decisions by the Division on site applications or facility designs must be appealed to the Commission by any person adversely affected or aggrieved as a prerequisite to the right of judicial review pursuant to the State Administrative Procedures Act. The appeal shall be made in writing to the office of the Administrator and be postmarked no later than thirty (30) days after the date of the mailing of the bulletin notice of the Division action. Within ninety (90) days of the filing of the appeal the Commission shall commence a hearing to consider such appeals in accordance with the provisions of section 24-4-105, C.R.S. If appeal is made to the Commission, the decision shall be made in accordance with the criteria specified in these regulations. Approval of a site application or facility design by the Division or the Commission in no way negates the necessity for all applicants to obtain all required approvals from other state and local agencies.

## **22.9 STATEMENT OF BASIS AND PURPOSE**

A written statement of the basis and purpose of these regulations and the amendments adopted by the Commission on November 18, 1981 has been prepared and adopted by the Commission. The written statements are hereby incorporated in these regulations by reference in accordance

with 24-4-103, C.R.S., as amended.

22.10

COLORADO DEPARTMENT OF HEALTH  
Water Quality Control Commission

Adopted: November 17, 1981

STATEMENT OF BASIS AND PURPOSE FOR  
THE AMENDMENTS TO THE REGULATIONS ENTITLED  
"REGULATIONS FOR SITE APPLICATIONS  
FOR DOMESTIC WASTEWATER TREATMENT WORKS

The subject regulations are for the implementation of the Colorado Water Quality Control Act, C.R.S., 25-8-101, et seq. Section 25-8-702 (1)(a) specifically requires the Water Quality Control Division to approve the site location of any domestic wastewater treatment works with designed capacity greater than 2,000 gallons per day prior to the commencement of the construction or expansion of the treatment works.

The regulations are intended to advise applicants for site approvals of the proper procedures for obtaining the site approvals and as to the minimum information necessary for the Division to determine if a site application should be approved.

Section 25-8-702 (2) specifically states: "In evaluating the suitability of a proposed site location for a domestic wastewater treatment works, the Division shall: (a) Consider the local long-range comprehensive plan for the area as it affects water quality and any approved regional water quality management plan for the area; (b) Determine that the plant on the proposed site will be managed to minimize the potential adverse impacts on water quality and; (c) Encourage the consolidation of wastewater treatment facilities whenever feasible". These factors are contained in the regulations and information necessary to evaluate those considerations are required by the regulations.

The only scientific and technological issues involved in these regulations are the preliminary design data, comprehensive planning, and facility management considerations which must be submitted to the Division so it may evaluate the site application against the statutory mandate. However, these regulations do not specify the details of such requirements since each application must be evaluated on its own terms. Therefore, further explanation here is unnecessary.

The site application forms will require submittal of technical data which allow the Division staff to evaluate such things as service area and population, treatment capabilities and alternatives, floor plain information, financial capabilities, and legal and institutional arrangements. Also, in regard to comprehensive planning, the forms will require information as to the relation of the proposed facility to existing and regional facilities and require that appropriate local governments and planning agencies have an opportunity to review the proposed project. An explanation of the costs of compliance with these regulations is discussed in the fiscal impact statement.

In considering the economic reasonableness of its action in adopting these regulations the Commission considered the cost of compliance with the expected benefits of maintaining existing uses of State waters. It found the costs of compliance to be an insignificant part of the overall scheme for protecting the State's waters. In addition, much of the cost of compliance with these regulations was considered by the General Assembly in adopting the site approval

requirement and would be incurred in the planning process and in obtaining a State discharge permit.

22.11  
COLORADO DEPARTMENT OF HEALTH  
Water Quality Control Commission

Adopted: November 17, 1981

FISCAL STATEMENT  
REGARDING AMENDMENTS TO THE REGULATIONS ENTITLED

"Regulations for Site Application for  
Domestic Wastewater Treatment Works"

Private and municipal applicants for approval of sites for the location of wastewater treatment works shall directly bear the cost of the rule and it is presumed that their cost will become a component of subsequent wastewater treatment fees imposed on persons or entities ultimately using the proposed treatment works. Such costs are those incurred by the site applicants for preparation of engineering studies and reports. The specific dollar amount will be a function of the complexity and size of the proposed wastewater treatment plant. The beneficiaries of this rule are those persons or entities utilizing the waters of the State into which the discharge from the proposed site would flow. The positive fiscal impact of this rule on beneficiaries will be from preservation of existing uses of the waters of the State from which users receive economic gain and other benefits.

Although there will be additional costs involved in the compliance with the requirements of this regulation, there was no specific economic data submitted to the Commission through the public hearing process and no testimony was given that the regulations themselves would cause an adverse economic burden. Furthermore such costs would be incurred as a part of the planning and permit processes.

**22.12 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE; 1996 AMENDMENTS**

The provisions of 24-4-103(4), 25-8-202(1)(e), (l), and (2) and 25-8-702, C.R.S., provide the specific statutory authority for consideration of the regulatory amendments proposed by this Notice. The Commission also adopted, in compliance with 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE:

A. Overview

The existing requirements which are being addressed in this proceeding have been in place since their original adoption in 1981. During this time, the Commission has become aware of minor deficiencies with these requirements. The changes adopted in this proceeding will further clarify already existing requirements for applicants as well as easing time constraints on all parties affected by appeal proceedings.

B. Title

The title of the regulations has been shortened to make it less cumbersome and to reflect the process to which it applies.

C. Vault

A definition of a vault has been incorporated as 2.2.2(22) to clarify the status of this type of Individual Sewage Disposal System (ISDS) with respect to this process. Vaults are recognized as a form of ISDS through 25-10-105(1)(h) and, as provided by Paragraph II.A. of the Guidelines on Individual Sewage Disposal Systems, required to obtain site approval when design flows exceed 2,000 gallons per day.

D. Consolidation

The required elements of the engineering report have been modified to include an analysis of opportunities for consolidation of treatment works together with other treatment alternatives at 2.2.4(3)(c)(iv). This should serve to reduce site application review times by providing information on feasibility necessary to comply with 25-8-702(2)(c).

E. Effective Date

The status of an approval which is under appeal to the Commission has been clarified by modifying 2.2.5(4). In at least two instances, applicants have questioned whether the approval date was the date of the Division action or the date of the Commission action. To clarify this confusion, the Commission has defined the date of its ruling on an appeal as the effective date of the approval.

F. Notice

The means of providing public notice of site application actions has been changed to reflect the correct title of the Commission's bulletin.

G. Appeals

The present requirements provided only a sixty (60) day timeframe within which to commence a hearing. This has created scheduling problems for the Commission and placed an undue hardship on all parties in adequately preparing for a hearing on such short notice. The Commission has, therefore, amended 2.2.5(7) of the regulation to allow up to ninety (90) days from receipt of an appeal to the commencement of a hearing.

**22.13 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE;  
JULY, 1997 RULEMAKING**

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of the attached regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

**BASIS AND PURPOSE**

The Commission has adopted a revised numbering system for this regulation, as a part of an overall renumbering of all Water Quality Control Commission rules and regulations. The goals of

the renumbering are: (1) to achieve a more logical organization and numbering of the regulations, with a system that provides flexibility for future modifications, and (2) to make the Commission's internal numbering system and that of the Colorado Code of Regulations (CCR) consistent. The CCR references for the regulations will also be revised as a result of this hearing.

#### **22.14 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JANUARY, 1998 RULEMAKING**

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of the attached regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

#### **BASIS AND PURPOSE**

Introduction: These revisions to the Regulations for the Site Approval Process 22 (5 CCR 1002-12) were initiated by an informational hearing in September, 1995. At that hearing, the Commission heard from several parties regarding improvements that could be made in the rules and, based on that input, decided to make several minor improvements without further public input. However, the Commission also realized that there were more substantive issues that would be best addressed by receiving more thorough input, and subsequently assigned the task of proposing major rule revisions to an advisory committee. The Water Quality Control Division was given the responsibility of preparing the list of minor changes as well as organizing the review team that would grapple with the larger issues.

Both processes were set in motion in late 1995, and the set of minor amendments was adopted by the Commission in May of 1996. The critical review team was organized in December, 1995, and was comprised of representation from consulting engineers, local government, regional planning agencies, wastewater treatment agencies, and the real estate development industry. The changes to the rule adopted in this action were the result of the work of the review team during 1996 and 1997. The following is a description of the rationale behind each of the changes.

Definitions. (22.2): Significant changes to the definitions included:

- "Application" was added to the definitions to avoid confusion as to what constituted an appropriate set of information from which to reach a decision.
- "Approval" was added to clarify that the Division's final action could take several forms.
- "Design Capacity" was modified to indicate that the means of expressing capacity is an important feature that must be provided consistently.
- "Domestic Wastewater" was modified to clarify that it does not mean process wastewater. This modification does not alter the terms usage and is consistent with the definitions of "domestic wastewater treatment plant" and "domestic wastewater treatment works."
- "Interceptor Sewer" was modified to clarify that a small number of taps does not automatically nullify the concept of a large receiving sewer, and that sewers less than 24 inches in diameter are not significant conveyances requiring site approval, except in unusual circumstances.

- "Population Equivalent, Throughput, and Transporting Entity" were deleted since they were no longer used in these regulations.

- "Process Wastewater" was added only to clarify the regulation. Its definition is the same as that contained in the Commission's Colorado Discharge Permit System Regulations, Regulation 61 (5 CCR 1002-61)

- "Vault" was modified by deleting the words "watertight, covered" to remove a perceived loophole in the regulation. It was determined that this is not inconsistent with the ISDS regulation, but that the Division would review the ISDS regulation to determine if it also should be modified.

- "Water Quality Management Plan" was added to clarify that not all plans are oriented towards managing water quality, a point of some confusion in the past.

Declaration of Policy (22.3): Much of the previous language in the section which sets forth Commission policy for issuing site approval was taken directly from the statute (§ 25-8-702, C.R.S.). To avoid redundancy and provide focus, only those three statutory policies expressly requiring certain considerations were repeated. The previous regulation also included a list of other policy considerations that were largely left intact, but included several important modifications. "Interceptor" was deleted from each policy where it appeared since they are not part of a "treatment works". Also, the statutory reference to design and construction of expansions, after certain capacity thresholds were reached, was deleted as redundant. Finally, a new policy, 22.3(6), which set forth conditions and procedures for a planning agency to enter into a coordinated review process with the Division, was included. This new policy addressed one of the main concerns with the previous rule in that plan amendment requirements were seen as duplicative of site approval requirements where viable area wide water quality management plans were in existence. This new policy will allow a coordinated and efficient review at both the regional and state level. A few minor changes to the list of policies, including a new, easy-to-read format, were also made.

Application Procedures - New (22.4): Another significant concern with the previous regulation was that it did not recognize the difference in complexity between application for an entirely new site as opposed to an expansion at an existing approved site. The changes made in this action recognize those differences by streamlining application procedures for expansions in a separate section. The prior rule also included application procedures for interceptors and lift stations under one set of requirements. Since these processes could be much more streamlined, they, too, were addressed in a separate section.

Section 22.4 now deals only with application procedures for new wastewater treatment plant sites. A number of minor wording changes help clarify the revised section, but several significant changes were also necessary. The requirement for an analysis of opportunities for consolidation has always been a subject of controversy, but the changes to 22.4(1)(b)(iv) should help by linking that analysis to a water quality management plan, thus avoiding redundancy. The flood plain analysis requirement was also clarified (22.4(1)(b)(vi)), and a new requirement to include soils and geologic hazard evaluation, prepared by qualified professionals, should help to assure that suitable plant sites are selected (22.4(1)(b)(vii)). The requirement of legal arrangements showing control of the site for the project life was expanded to include the ability of the entity to acquire the site and use it for the project life. It was clarified that any approval based on this was not to be used as a justification in a condemnation proceeding (22.4(1)(b)(ix)).

The review and sign-off procedures in 22.4(2) were extensively revised to make the process more efficient. Among the more significant changes was the inclusion of a requirement that the Division solicit comments from any review agency who has not submitted comments on an application. This requirement will help assure that nearly all applications have the full review of appropriate agencies. More definition of the scope of the review requested from municipalities and local health authorities was also included.

The requirement that the State Geologist review each application was deleted from the list of review agencies. This action was taken largely because of the inclusion of more extensive geologic information now required as part of the engineering report (see 22.4(1)(b)(iv)), including the requirement that the information be developed by a professional geologist and a geotechnical engineer, or a professional who meets the qualifications of both geologist and geotechnical engineer.

This review was also considered a costly evaluation which produced little in the way of added value. A new provision was added allowing the Division to require that an applicant ask for review and comment from other agencies, including the State Geologist regarding potential geologic hazards, if it feels such review is needed (22.8(2)).

Application Procedures - Expansions (22.5): Since expansions at existing approved sites do not have to meet the same threshold tests as new sites in the areas of site suitability, financing, institutional and management considerations, the application and review requirement should be streamlined accordingly. This has been addressed by adding a new section specifically for expansions. Section 22.5 includes less complex application requirements and a somewhat abbreviated review process. These changes were made in response to review committee input that stresses the importance of a discharger's treatment "track record" as the most important consideration when an application to expand was pending. The typical questions of site suitability and long-term ability to treat wastes asked of new applicants were largely moot in the case of expansions. A provision allowing the Division to require a geologic report, as in section 22.5, was included. Section 22.8(2), which allows the Division to require that an applicant ask for review and comment from other agencies, is also applicable to section 22.5.

Application Procedures - Lift Stations/Interceptors (22.6): In the previous regulations, application requirements for all types of facilities were merged into one section. This has created some confusion and unnecessary work, particularly for new interceptor sewers and lift stations. Section 22.6 alleviates this confusion by separating out the application, certification, and review procedures for interceptors and lift stations. The certification procedures for interceptors are largely unchanged, but is now less confusing since it is dealt with in a separate section (22.6(1)). The application procedures for ineligible interceptors and all lift stations is streamlined and clarified in 22.6(2), and the approval process is much improved by requiring only statements of consistency with appropriate plans as the heart of the review. Division oversight of that determination of consistency is correspondingly minimized.

Application Procedures - Amendments (22.7): Experience with the site approval process has revealed that occasionally it is necessary to amend approved applications. These changes are often the result of new effluent requirements brought about because of revised stream standards or other regulatory changes. Occasionally, it is simply a matter of upgrading a facility with new technology without expanding the capacity (expansions require site approval via 22.5). An informal amendment process has been in place since that need was recognized, but this process is now formalized with the inclusion of 22.7. That section sets forth the circumstances when an amendment is necessary, the minimal information requirements in the application, and

the streamlined review process.

Criteria for Decision Making - (22.8): Most of the criteria guiding Division and Commission decision-making was retained from the existing regulation. However, some modification to the criteria dealing with consolidation opportunities was made for clarification purposes, and a new criteria was added to emphasize the important role that current and comprehensive area wide water quality management plans play in reaching a site approval decision.

Parties to the Rulemaking Hearing

1. Denver Regional Council of Governments
2. Metro Wastewater Reclamation District
3. Aspcol Corporation, N.V., Douglas and Barbara Scheffer, and Puma Paw Ranch, Inc.
4. The City of Colorado Springs
5. North Front Range Water Quality Planning Association
6. Pike Peak Area Council of Governments

## Appendix B – Water Quality Control Division Consolidation Policy

### FACTORS FOR USE IN DETERMINING FEASIBILITY OF CONSOLIDATION

Water Quality Control Division  
Drinking Water & Wastewater Technical Services Unit  
Staff Guidance Document  
March 8, 1999

**DISTANCE** - If the distance to the closest existing/proposed wastewater treatment works, or from a sewer line capable of carrying the proposed flows to an existing treatment works, is less than five miles, a cost effective analysis of alternatives to include consolidation with that facility is to be prepared. If the distance is in excess of five miles, no further analysis of consolidation is required.

**WATER QUALITY IMPACTS** - Where consolidation can improve the level of wastewater treatment and thereby result in improvements to surface and/or groundwater quality, further analysis of consolidation should be explored.

**STREAM FLOW** - If the consolidation of treatment works would alter flows in a stream or stream segment or transfer a sufficient amount of water to another stream or stream segment resulting in overwhelming adverse effects on either stream, or the effluent limits of other treatment works would be lowered and additional treatment processes would be required, no further analysis of consolidation is required.

**ENDANGERED SPECIES** - If endangered species inhabit or utilize the only site which could serve a consolidated treatment works or a site through which interceptor lines would have to pass to reach a consolidated treatment works site, such evidence shall be presented and no further analysis of the consolidated alternative will be required.

**WATER RIGHTS** - If the consolidation of treatment works would alter the discharge of effluent to the degree that a violation of the water rights decree/augmentation plan of one of the parties to the consolidation occurred, evidence of same shall be presented and no further analysis of that consolidation alternative shall be required.

**LOCAL PLANS** - If the proposal to consolidate treatment works is in direct conflict with a specific recommendation of the county's or city's Comprehensive Plan, an approved Water Quality Management Plan, and/or a formally approved 201 Facility Plan, with respect to the treatment of wastewater from the proposed service area, and the entity responsible for the development of the respective plan recommends against consolidation, no further analysis of consolidation is required.

**ECONOMIC ANALYSIS** - Unless another factor contained in these criteria results in a determination that consolidation is not feasible, a cost effective analysis shall be prepared to use in comparing consolidation to Separate facility alternatives. Costs included in this analysis shall include land acquisition, capital construction (including such unique construction expenses as floodproofing, water rights compliance, and wetland mitigation), interceptors and lift stations, treatment plant expansion and/or upgrade, debt retirement expenses, and operation and maintenance for a minimum period of 20 years for each alternative considered. Other unique costs, specific to one or more of the alternatives under consideration may also be appropriate for consideration, i.e. value of water for reuse either by the applicant or through sales to another party. Cost comparisons shall be made on the basis of cost per 1,000 gallons treated as well as net present worth. If the cost of consolidation exceeds the cost of separate plant construction by more than 30%, no further analysis of consolidation is required.

**SERVICE AREA** - If the site or service area of a proposed facility is within the service area (as defined in an adopted local comprehensive plan, an approved 201 facility plan, or approved 208 water quality management plan) of a district or municipality providing wastewater treatment service, the application must include that district or municipality as the applicant or co-applicant and must provide for consolidation of either treatment facilities or management and operation. An exception may be granted if the proponent is an existing district or municipality also identified in the respective plan(s).