

Template for comments and secretariat observations

Date: August 9, 2004 Document: ISO TC 224/SC N 149; ISO/WD 24511

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
US			Te	Storm water system service in the U.S. is often provided by a different organization than the wastewater system service provider (in the case of separated storm sewer systems). These systems are operated differently from wastewater systems and focus heavily on best management practices for pollution prevention (e.g., public education, construction site controls, illegal discharge detection, etc.) and not on treatment of undiluted storm runoff.	It is proposed that either separate storm water service is not covered by this ISO standard, or that a separate section of the standard be written that addresses separate storm sewer service. This section should address systems that control pollution by implementing best management practices (e.g., setting up a program to inspect construction sites, regular street cleaning, etc), and not necessarily on the treatment of undiluted storm water.	
US	Introduction: Page 7; final paragraph		Ed	Makes clear in the introduction that wastewater treatment systems are to benefit environmental and public health but must balance these concerns with the real constraints of economic, technological, and other realities.	Wastewater systems are built and operated [delete mainly] to protect the public health and the environment. The type of wastewater system should be chosen and adapted in context with the density of the population <u>and the available or potentially feasible infrastructure</u> . It should permit phased development <u>that reflects the economic and technological capabilities of the region while not</u> [delete to overcome the financial constraints] compromising the stated objectives	
US	Section 1 Scope — Title		Ed	This description is more specific and makes it clear that these are guidelines not only for management, but also assessment, of wastewater system services	Service activities relating to the drinking water supply and sewerage — <u>Guidelines for the management and assessment</u> of wastewater system <u>services</u> [Same as water system service title]	
US	Scope; par. 2		Te	This is a more appropriate description and is responsive to the independent nature of storm water issues in the United States. Since the U.S. did not convince the other countries that storm water should not be included last time, we wanted to make clear what was the scope of the standard.	Wastewater in this standard includes sanitary and industrial wastewater allowed to be discharged into a sewer system outside buildings, as well as sanitary waste in undiluted form, <u>and</u> sanitary wastewater combined with storm water [delete and storm water that does not include sanitary wastewater]	
US	Scope; par. 5		Ed	Focuses again on the services, which are the subject of this standard	Definitions of the characteristics of the elements of the wastewater system service	

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US	Scope; par. 6		Ed	Is more clear about these being guidelines and not requirements	A list of <u>guidelines</u> [delete <i>requirements to be fulfilled</i>] for the <u>management of the</u> operation and maintenance [delete (<i>management</i>)] of a wastewater system,	
US	Scope; par.9		Ed	Again, this wording provides more specific terminology in terms of owner /contractor-provided services and includes a needed sentence on national and local regulations being part of the scope of the standard	<ul style="list-style-type: none"> — Methods <i>for the</i> design and construction of wastewater systems — <u>Type of management structure including who should be providing the service, the owner or third party contractor</u> — <u>National and/or local regulations governing wastewater collection and treatment, wastewater effluent and the disposal of other residuals such as sludge or biosolids</u> 	
US	3.4		Ed	More appropriate terminology that better reflects the goals of asset management.	3.4 Asset management: The processes that enable a service provider to <u>optimize</u> [delete <i>minimize</i>] the cost of. . . .	
US	3.7 – recommended addition		Te	Biosolids is the preferred term in the U.S. for sludge produced by the wastewater treatment process. Sludge carries with it a distinctly negative connotation. The U.S. EPA uses the term “biosolids” for the reusable organic solids.	<u>3.7 Biosolids</u> <u>Primarily organic solid product, produced by wastewater treatment processes that can be beneficially recycled. Beneficial recycling includes land application to improve soil characteristics, heat and energy recovery, and production of useful products</u>	
US	Former 3.7 should now be 3.8 and the numbers reordered accordingly		Ed	“”	Former 3.7 should now be 3.8 and the numbers reordered accordingly due to the addition of the biosolids definition as 3.7	
US	3.18, note 2		Te	Do not agree that any one interest represents the	Propose to end note 2 after “... environment is	

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				environment. All parties involved in providing the service have an interest in environmental stewardship.	considered a specific stakeholder.” (note this definition is common to all documents).	
US	3.20 [a recommended addition]		Ed	Fair is used in a number of places throughout the standard documents and needs a definition.	3.20 fair <i>Free from favour to any side, a proper balance of conflicting needs, rights, or demands</i> ** this will require a renumbering from 3.20 on ** —	
US	3.37		Ed	Term obligatory, if used, requires a specific definition in the context of the ISO standards. Alternatively, it should not be used.	Requirement Need or expectation, generally implied [delete or obligatory] (an alternative to omitting obligatory is to clarify what obligatory means)	
US	3.40, Note 3 (last line)		Ed	The term ambiance can have different meanings to different people especially in the context of users or customers and should be defined more specifically or not used.	[Delete creation of ambiance for the user (e.g. customer reception offices)], (An alternative is to define ambiance separately)	
US	3.43		Ed & Te	Defining stakeholder as someone who “Perceives to be affected” would open this definition up to virtually anyone, whether or not they are in fact affected.	3.43 Stakeholder Person or group or organization likely to affect or to be affected by the service [delete or which perceives to be affected]	
US	3.48		Ed	Is not relevant given the definition of on-site system in 3.49	Recommendation is to delete all of 3.48	
US	3.53		Te	The need to include stormwater where appropriate is important to the U.S. insofar as it is done in a manner that accounts for the uniqueness of stormwater management, which often is not in the control of the sewer system services provider.	3.53 Sewer system Network of pipelines (drains and sewers) and auxiliary structures (e.g., gullies, pumping) . . . which conveys wastewater <u>and/or</u> stormwater	

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US	3.55		Ed, Te	The definition of wastewater, when drafted, should include the various distinctions made in the U.S., which carry with them different service concerns and obligations.	Wastewater [when drafting, include distinction between industrial and commercial wastewater, in contrast to domestic-only wastewater]	
US	3.56		Te	Biosolids is the preferred term in the U.S. for the resource produced by the wastewater treatment process. Sludge carries with it a distinctly negative connotation. The U.S. EPA uses the term "biosolids" for the reusable organic solids.	<i>Add definition for sludge [as distinguished from biosolids] [We will have draft language for this available for the Morocco meeting]</i>	
US	3.57		Te	There is a need for specificity regarding this term given the different manners in which stormwater is collected and treated in various countries	<i>Add definition for stormwater [We will have draft language for this available for the Morocco meeting]</i>	
US	4		Te, Ed	The term "Physical" identifies the list more distinctly as opposed to other types of assets or components of wastewater systems. This clearly delineates the physical from the management components of wastewater system service.	<i>Physical</i> components of wastewater system <u>service</u> [We will have draft language for this available for the Morocco meeting]	
US	4.1, paragraph 1		Ed	There is no need to discuss and then have to define here what constitutes a small community	Delete for a small community	
US	4.1, paragraph 3		Ed	Characterizes the list as representative, not all-inclusive, so that other physical components can still be included if needed.	Depending on the extent of the development of the wastewater <u>system</u> services in <u>a</u> particular country or area <u>not all</u> of the above mentioned components of the system <u>are necessary</u> . <u>The following list of physical components is representative and should not be viewed as all-inclusive.</u>	
US	4.2.2		Ed	The typical term used in the U.S. for treatment beyond secondary is advanced.	Preliminary/primary/secondary/ <u>advanced</u> [delete <u>complementary</u>]	
US	4.3.2		Ed	Biosolids is the preferred term in the U.S. for the reusable resource produced by the wastewater treatment process.	4.3.3 Transportation methods of wastewater or <u>biosolids</u> [delete <u>sludge</u>]	

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US	4.3.3		Te, Ed	Again, biosolids is the preferred term in the U.S. for the reusable resource produced by the wastewater treatment process and incineration and land application are two distinct management methods for biosolids, which should be listed here.	<p>— <u>Sludge and/or biosolids</u> disposal system include:</p> <ul style="list-style-type: none"> - buried in situ; - dumping site; - <u>disinfection</u>; - <u>incineration</u>; - <u>land application</u> 	
US	5		Te	Clearly delineate the physical from the management components of wastewater system service. The rewrite of this section will help harmonize drinking and wastewater documents, and would provide a greater focus on the need for integrated and continuous management systems.	<p>5 Management of wastewater system <u>services</u></p> <p>[5.1 should be rewritten as follows:]</p> <p>The management function of the wastewater system service is to effectively plan, construct, operate and maintain the physical components of the wastewater system to collect, transport, treat, dispose and/or reuse wastewater and its residues to ensure that the main objectives of the system are fulfilled. The three principal objectives for the management of the wastewater system are:</p> <ul style="list-style-type: none"> - set objectives for the wastewater system based on social, cultural and environmental needs of the region (subclause 6.2); - ensure there is adequate planning and proper construction of the physical components of the wastewater system; - provide sufficient resources for 	

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					<p>the operation and maintenance of the physical components of the wastewater system</p> <p>The organization's management structure should be designed to ensure the safe and successful planning, implementation, monitoring and checking of all tasks and activities and should encompass the full range of services and functions provided. The management structure should integrate all the functions into an integrated management system similar to ISO 9000 or ISO 14000. Performance shall be related to the objectives and measured by performance indicators. [The remainder of 5.1 should remain as is except for following minor edit below]</p>	
US	5.1, second to last paragraph		Ed	Shall is too prescriptive.	To assess whether . . . , a set of service quality criteria <i>should</i> [delete <i>shall</i>] be used	
US	5.2		Te	The rewrite of this section will help harmonize drinking and wastewater documents, and would provide a greater focus on the need for integrated and continuous management systems. There is also a need to clarify whether this is a normative reference to the customer service standard. Responsible bodies should have the flexibility to implement the standards in a "phased" approach. Following the water or wastewater system service standard should not automatically require adherence to the customer service quality standard, though this may be an ultimate goal.	<p>5.2 Organization structure and responsibilities</p> <p>The wastewater system management should provide a well-structured documentation of its hierarchy and organization of workflow. Periodic reviews of the management system should be carried out to ensure continual improvement.</p> <p>Management should check all existing regulations for their proper application. Should they detect flaws in the hierarchy, workflow organization and/or documented regulations, they should initiate immediate remedial action.</p> <p>Management is responsible for having a sufficient number of qualified staff to perform all activities. This number should include staff</p>	

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					<p>to monitor and administer contracts and operate in emergency situations.</p> <p>Within the framework of general administration, customer care and public information is covered through ISO/WD 24510 Service activities relating to drinking water supply and sewerage — Guidelines for the service to users.</p> <p>Financial management responsibilities include providing adequate funding for day-to-day operations and long-term capital requirements.</p>	
US	5.3		Te, Ed	The edits here are relatively minor and are for clarity's sake; they also reference the need in planning and construction for environmental and economic concerns to be taken into account compatibly.	<p>5.3 Planning and Construction</p> <p>The planning of the development of the wastewater system should be based on a long-term strategy for environmental protection and to <u>safeguard of public health</u> by improving [delete <i>step-by-step</i>] the wastewater <u>system and</u> taking into account the population and urbanization development [delete <i>the safeguard of public health and mitigation of flooding hazards</i>].</p> <p><u>The construction of wastewater system services components should be carried out in an economically and environmentally compatible manner.</u></p>	
US	5.4, 1 st paragraph		Ed	Again, this change is for increased accuracy	Operation and maintenance concern the <u>physical</u> assets . . .	
US	5.4, 4 th paragraph		Ed	Again, biosolids is the preferred term in the U.S. for the reusable resource produced by the wastewater treatment process	Treatment, reuse and <u>biosolids</u> [delete <i>sludge</i>] disposal or discharge	
US	5.4, final		Ed	This emphasizes the need for a written plan of operating	The wastewater operator <u>should develop a</u>	

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	paragraph			procedures, and also references the need to consider emergency situations – both man-made and natural. This provides a reference to the need for continuous development of vulnerability assessment and emergency response plans.	<i>plan and written standard operating procedures for operation and maintenance strategy covering both planned and corrective activities. Written plans should also be developed for maintaining essential wastewater treatment services during emergency situations involving man-made or natural disasters.</i>	
US	New 5.5 and 5.6		Te	To improve consistency with document N148, and because the protection of the environment and management support activities are integral to management of the operation.	Add Section 5.5 and 5.6, "Protection of the environment" and "Support Activities." See text detail in N148, sections 7.5 and 7.6 (section 7.6 from N148 would need to be shortened somewhat).	
US	6		Ed	Would support separating bulleted text into subsections as done in document N148.		
US	6		Te	N148 includes a section on provision of services under normal and emergency situations. The N149 does not include such a discussion, and it appears to be applicable.	Add section for "Provision of services (under normal and emergency situations)." (e.g., "an objective of a wastewater system service to ensure that under normal conditions, wastewater discharged to the system is transported and treated in accordance with local regulations and policies.")	
US	6.1		Te	Again, these changes will help increase the consistency between the drinking water and wastewater standards and also references the important need for "plan-do-check-act" continuous management systems as well as the consideration of affordability as a condition to developing objectives for what can realistically be accomplished by wastewater systems.	<i>Management should develop objectives for the wastewater system services in accordance with the "Plan-Do-Check-Act" stratagem, as outlined in the ISO 9000 series. The objectives should take into account all national and local regulatory requirements and objectives of other stakeholders.</i> <i>Affordability for customers shall be a general condition to develop objectives for the management of wastewater systems. The following steps should be used to measure management's ability to meet their objectives.</i>	

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					<i>[the rest remains the same]</i>	
US	6.2		Te, Ed	Identifies the fact that objectives can differ based on regional social, cultural, economic and environmental needs, though the standard is meant to be international in scope.	<p>6.2 <u>The following objectives are considered to be principal objectives shared by most stakeholders , however they are not all-inclusive.</u></p> <p>Objectives are generally defined for a certain region <u>based on its social, cultural and environmental needs and should be</u> expressed in the form of performance requirements.</p> <p>Objectives of wastewater <u>systems</u> services should consider:</p>	
US	7	Title	Ed	To clarify purpose of section.	Change “Requirements for the management of wastewater system service” to “Management guidelines for achieving the objectives of wastewater system services.”	
US	New 7.8		Te	To improve consistency with N148, and improve applicability of wastewater standard.	Add Section 7.8, “Integrated water resources and environmental management”	
US	New 7.9		Te	To improve consistency with document N148, and improve applicability of wastewater standard.	Add Section 7.9, “Risk Management”	
US	9.3		Ed	Clarifies the language	PIs should be accompanied [delete of] <u>by the necessary contextual</u> information to aid in its interpretation	
US	B.1		Ed	This was listed twice in Annex B	[Delete <i>train personnel to upgrade their abilities</i>	
US	B.2		Ed	Clarifies the intent of the language	Develop a service charge structure <i>equitable across</i> [delete <i>reasonable to</i>] . . .	
US	B.3		Ed	Clarifies the language – requests rather than opinions is appropriate in this context.	Respond to users/customers complaints and <u>requests</u> [delete <i>opinions</i>] swiftly and appropriately;	

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					Provide users/customers with communication opportunities to express their <u>needs</u>	
US	B.4		Ed	Same as above	<p>[Delete <i>optimize energy efficiency and</i>] minimize environmental loads;</p> <p><u>Optimize the energy efficiency of wastewater collection and treatment systems to minimize</u> consumption of electric power in wastewater utilities;</p> <p>[Delete: <i>take care of diffused pollutants in rainwater from separate sewer systems</i>]</p> <p><u>Maximize the beneficial</u> utilization of <i>biosolids</i> [delete <i>sludge</i>] <u>in wastewater treatment</u> by-products</p> <p>[delete <i>sludge</i> in next line as well and replace with <i>biosolids</i>]</p>	
US	C.2.1, line 2		Ed, Te	Greater specificity	<u>Hydraulic and treatment</u> capacity	
US	C.2.1		Ed	Greater specificity	<ul style="list-style-type: none"> - Delete <i>man-power</i> and replace with <u>labor resources</u> - Add <u>costs of operation and maintenance</u> below meeting future requirements 	

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US	C.3.2 & C.4.1		Ed	Appropriate terminology	Replace term "sludge" with <u>biosolids</u>	

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