

CITY OF SAN DIEGO
MEMORANDUM

DATE: December 4, 2000

TO: Distribution

FROM: Karen Henry, Storm Water Administrator, Environmental Services Department, Environmental Protection Division, and Barbara A. B. Salvini, Senior Civil Engineer, Planning & Development Review Department, Wastewater Section

SUBJECT: The Proper Disposal of Storm Water, Groundwater, Wastewater, and other Types of Allowable Discharges

The purpose of this memorandum is to clarify implementation of San Diego Municipal Code Sections 43.0304, 43.0305, 64.0102, and 64.0512 as they relate to the proper disposal of wastewater, groundwater, and storm water. Also included are guidelines regarding Regional Water Quality Control Board regulations and the City's program to divert low flow street drainage to the sanitary sewer system in coastal areas.

This memorandum supercedes all previous correspondence relative to the disposal of wastewater, groundwater, storm water, and other types of allowable discharges. This document does not override any current or future departmental instructions, council policies, or municipal code sections which pertain to discharges. Instead, it is meant to serve as a practical user's guide to interpret and understand the existing legislative and policy documents. At the end of the document there is a list of definitions, excerpts from the various applicable codes, and a Manager's Report that some may find helpful. To see a detailed and comprehensive copy of the applicable Municipal Code Sections, please visit our web site at www.ci.san-diego.ca.us.

The City of San Diego has separate systems to handle rainwater and sewage wastes. The Municipal Code defines wastewater, storm water and other water sources that may be discharged into these systems. Water from some sources may require permits from the Regional Water Quality Control Board prior to offsite discharge. Certain discharges may need pretreatment and/or testing while some may not be suitable for offsite discharge of any kind and must be eliminated or managed onsite.

Storm Water

All water generated as rain or snow must be discharged to the storm drain system and natural water bodies provided that the water is free of pollutants to the maximum extent practicable. This includes trench drains at the entrance of parking structures and interior parking garage drains where the openings to the structure are not protected by two foot overhangs. Water from these sources may be discharged either as surface runoff or directly to an extension of the storm drain system, depending on quantity. Please refer to the City of San Diego Drainage Design Manual for additional information. Roof drains and drains from pool decks are examples of

water that must be discharged to the ground or to the storm drain system. Storm water discharges are required to incorporate Best Management Practices (BMPs). Examples of BMPs are grass swales, wet ponds, and filters. For more information on BMPs and specific project requirements, please contact the Storm Water Pollution Prevention Program at (858) 492-5040.

In certain cases, where very small quantities of storm water are involved and there is no potential for hazardous waste contamination, the storm water may be permitted to discharge to an onsite retention facility and allowed to percolate into the soil through a dry well. An example of such a system may be found in Regional Standard Drawing SDM-107. This type of system will only be considered in situations where alternative solutions are not feasible and will be reviewed and permitted only on a case by case basis.

Groundwater Seepage/Infiltration

Groundwater falls into two categories: 1) groundwater that can gravity flow to the nearest storm water collection system, and 2) groundwater that must be pumped.

Gravity Discharged Groundwater - Passive footing drains and discharges of groundwater by gravity are acceptable non-storm water discharges into the storm drain system. If a project is below the groundwater table and will have non storm event seepage, then the system must drain directly to the storm drain or to a natural water conveyance system. In other words, it is not acceptable to allow groundwater to drain to a curb during dry weather. In such cases, the development will be responsible for extending the storm drain system to the property boundary.

Pumped Groundwater - Pumped groundwater, such as that created where subterranean parking structures are desired below the water table, requires a permit from the Regional Water Quality Control Board (RWQCB) per RWQCB Order No. 96-41. Please include a copy of the approved permit when making application for a structural and/or mechanical plan review. A copy of the required permit and application materials are available at the RWQCB offices. For additional information regarding RWQCB permits and requirements, please contact the Board directly at (858) 467-2952 or you may visit their web site at www.swrcb.ca.gov/rwqcb9/. Please note that the RWQCB prohibits pumped groundwater discharges within the San Diego Bay watershed and other sensitive areas. The City of San Diego does not permit projects that have pumped groundwater to discharge to the storm drain system in areas served by a low flow storm drain discharge diversion project. These systems pump dry weather flows from the storm drain system to the sewer system. They are typically located in areas that drain into bays, lagoons and beach areas. For additional information on groundwater discharge, please see the attached memo to Plan Check staff dated March 26, 1991 and the City Manager's Reports dated January 9, 1991 and May 29, 1991.

In areas where offsite discharge of pumped groundwater is prohibited, the project must either be designed without subterranean structures or the basement must be designed to be completely water tight. Foundation walls must be designed to withstand hydrostatic and uplift pressures.

This special design consideration should be mentioned in the cover letter for the project submittal.

From time to time, the RWQCB may modify groundwater discharge requirements. Engineers and architects are cautioned that pumping groundwater may worsen an existing or future soil contamination problem in adjacent properties. Long term groundwater pumping may result in the water becoming contaminated from nearby hazardous waste sites such that the RWQCB may no longer allow discharges to the storm water system. In such cases, at best, a pretreatment system may be able to remediate the water to an acceptable level. In a worse case scenario, the basement may have to be filled and there may be liability for exacerbating the hazardous waste condition.

Groundwater Remediation and Temporary Construction Dewatering

Per the San Diego Municipal Code (SDMC), discharge of uncontaminated groundwater from any source may not be discharged into any sanitary sewer system on a permanent basis. However, Section 64.0410 of the SDMC allows for the temporary discharge of groundwater to the sanitary sewer, with a waiver of capacity charges, through issuance of an Industrial Users Wastewater Discharge Permit. Provided the applicant can demonstrate capacity is available, these permits are granted by the City's Industrial Wastewater Control Program for a maximum period of one year and an additional one year extension may be granted in certain cases. Examples where such permits may be granted would be for construction dewatering or for groundwater remediation projects. Dependent on the contamination level of the groundwater, onsite pretreatment may be required as a condition of the Permit. For additional information regarding Temporary Groundwater Discharge Permits, you may contact the City's Industrial Wastewater Control Program at (858) 654-4100.

Wastewater

Unless listed as a specific exemption, wastewater discharges are not allowed to be discharged to the street, canyon or storm drain system. The development of a site must be designed to prohibit activities that unnecessarily pollute clean water and that discharge clean water to the sanitary sewer system.

Interior floor drains in above grade parking garages, which are not intended to collect storm water, need to be plumbed and vented as required for all interior building floor drains and discharged to the sanitary sewer. An interceptor, oil separator, or other approved method of protection, shall be required prior to connection to the sanitary sewer system.

Outdoor sanitary sewer system connections will be permitted only if covered by an overhead structure, with a minimum two foot overhang, and designed to prevent run-on or if other special mitigation measures are taken such as an approved rainwater diversion system. Run-on prevention can be accomplished by isolating the covered area with berms, grading all adjacent ground to drain away from the sewer drain, or intercepting the flow with an approved storm

drain system. For example, some restaurants and fish markets may need an outdoor sanitary sewer connection in order to properly dispose of waste from food preparation operations conducted outside or from washing out the interiors of delivery trucks and shipping containers. Under these circumstances, the plan checker will consult with staff from the Wastewater Section of the Planning & Development Review Department and the Storm Water Pollution Prevention Program in order to determine, based on specific site conditions, what special mitigation measures may be required.

Reclaimed Water

The use of reclaimed water (recycled water) is regulated by the California Regional Water Quality Control Board (RWQCB), the California State Department of Health Services, and the San Diego County Department of Environmental Health. Because reclaimed water is considered unsafe for human consumption, it must be distributed, beneficially used, and discharged in a manner that meets all Federal, State, and Local requirements. Reclaimed water must be controlled and regulated during its use to prevent run-off into the storm drain system and onsite ponding through proper design and installation practices. Discharging reclaimed water into the storm drain system or discharging to waters of the State of California is not permitted.

San Diego Municipal Code Section 64.0808(a) establishes the “Rules and Regulations for Reclaimed Water Use and Distribution within the City of San Diego.” California Water Code Section 13050 addresses the applicable discharge prohibitions of reclaimed water as described by the RWQCB. For additional information regarding the proper discharge and disposal of reclaimed water, please contact the City of San Diego Water Department, Reclaimed Water Division, at (619) 533-5273.

Other Water

Other types of clean water that should be discharged to the storm drain include potable water, irrigation water, water from crawl space pumps, water from non-commercial vehicle washing, dechlorinated swimming pool water, fire fighting water and waters not otherwise containing wastes as long as they do not contribute to a violation of any Regional Water Quality Control Board Basin Plan Standard.

For example, water to be drained for the cleaning of ponds, pools, or fountains may be either discharged to a leach field or to the storm drain system after it is sanitized, to remove any bacteria, and then dechlorinated. For large facilities, a per event permit may be allowed for drainage into the sanitary sewer system. Such permits will be issued on a case-by-case basis and only during dry weather. Swimming pool or fountain cleaning water (acid washing) may be accepted for discharge to the sanitary sewer through an indirect connection and with an Industrial Wastewater User’s Permit. Please contact the City’s Industrial Wastewater Control Program at (858) 654-4100 for information regarding these permits.

Air conditioning condensate water may, in some cases, be micro biologically unsafe and should ordinarily be plumbed to the sanitary sewer. However, it may also be acceptable for air conditioning condensate water to discharge to the storm drain system or to an onsite dry well.

Elevator Pits or Other Possible Sources of Hazardous Waste Contamination

Discharges from elevator pits are not specifically addressed by the California Plumbing Code. However, the California Code of Regulations (CCR), Section 3010, requires that pits extending below grade be designed to prevent the entry of groundwater into the pit. In addition, Section 3016 of the CCR requires the following:

“Drains or sumps in elevator pits shall not be used as the normal means of drainage for liquids directed into the pit from other areas of the building. Drains connected directly to sewers shall not be installed in elevator pits. Pits shall be maintained in a clean and dry condition.”

Generally, elevator pits may discharge to the sanitary sewer via an air gap but must be designed to prevent storm flows and spills from the surrounding area from entering the pit.

Storm water impounded in bulk chemical and hazardous waste storage areas may not drain directly to either the storm or sanitary sewer system. In certain cases, contaminated storm water may qualify for conditional discharge to the sanitary sewer with an approved Industrial Users Wastewater Discharge Permit or Batch Discharge Authorization. For example, impounded storm water from electrical vaults and boatyard and auto dismantling yard storm water, which has been captured and is released no sooner than 24 hours after the end of the rain event, may be eligible for a Wastewater Discharge Permit. Please contact the City's Industrial Wastewater Control Program at (858) 654-4100 regarding permits and for additional information on acceptable discharge limits and pretreatment requirements.

Combination Situations

In some instances, the Architect or Engineer may want to combine the foundation, elevator pit, parking garage floor drains and the parking garage entrance drain together. In all cases, the requirements in the preceding paragraphs should be followed and the discharge systems separated. The following are several examples:

- 1. An underground parking garage.** Passive footing drains and trench drains at the garage entrance may discharge by gravity into a storm drain system.
- 2. A system requiring pumping of groundwater.** For a permanent system, a Regional Water Quality Control Board permit may be required for discharge to the storm drain system. In some cases, groundwater pumping to the storm drain may not be allowed. A temporary discharge to the sanitary sewer may be allowed through an Industrial User's Wastewater Permit for a maximum period of two years. However, groundwater from any source is always prohibited from permanently discharging to the sanitary sewer system.

3. Parking garage floor drains in an enclosed structure. If the enclosed garage drains will not capture rain water, they may not be connected to the same system as the parking garage entrance trench drain since the floor drains must discharge to the wastewater system and the parking garage entrance trench drain must discharge to the storm drain system. If the parking structure is open sided and will collect storm water, then both the entrance trench drain and the floor drains are to discharge to surface waters or the storm drain system.

4. Roof drains and patio or parking lot drains. These may be co-plumbed for discharge to the storm drain system since both of these meet the definition of clean water and are not permitted in the sanitary sewer system.

We hope that the above guide assists you in understanding the various regulatory requirements that effect you and we wish you success in your project. We appreciate your help in keeping our waterways and coastal areas clean and in maintaining capacity in our wastewater collection and treatment systems.

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Attachments:

1. Definitions and Municipal Code References
2. Groundwater Discharge - City Manager's Report dated January 9, 1991
3. Permanent Dewatering Systems for Basements - City Memorandum to Plan Check staff dated March 26, 1991
4. Permanent Groundwater Discharge Strategy - City Manager's Report dated May 29, 1991

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DEFINITIONS AND MUNICIPAL CODE REFERENCES

The following definitions and code sections may be helpful in implementing the guidelines for proper disposal of storm water, groundwater, wastewater, and other allowable discharges.

The American Water Works Association and the Water Pollution Control Federation, referenced in SDMC Section 64.0200, defines:

Wastewater as used water and solids from a residence or a community (including used water from industrial processes) that flow to a septic system or treatment plant. The term sewage usually refers to household wastes, but this word is being replaced by the term wastewater.

Micro biologically unsafe water as water that is known to contain disease causing bacteria, viruses, protozoa, or other disease causing microbiological agents, or shows a positive test for an indicator organism such as coliform, fecal coliform, or E. coli bacteria, or is determined unsafe by an appropriate health or regulatory agency.

Fecal Coliform bacteria as bacteria found in the intestinal tracts of mammals and, therefore, in fecal matter. Their presence in water or sludge is an indicator of pollution and possible contamination by pathogens.

Per SDMC Section 64.0200 (k) - Waste shall mean wastewater and any and all waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation of whatever nature, including such wastes placed within containers of whatever nature, prior to and for the purpose of disposal.

SDMC Section 64.0512(b)(6) - The following pollutants shall not be introduced into a public sewer which directly or indirectly connects to the City's wastewater system: Any rainwater, storm water, groundwater, street drainage, subsurface drainage, roof drainage, yard drainage, water from yard fountains, ponds or lawn sprays or **any other uncontaminated water**.

SDMC Section 43.0304 - Except as provided in SDMC section 43.0305, it is unlawful for any person to discharge non-storm water into the storm drain system, canyons, streets, or alleys where storm water runoff is defined as surface runoff and drainage associated with storm events and snow melt which is free of pollutants to the maximum extent practicable.

Per SDMC Section 43.0305, the following are acceptable non-storm water discharges into the storm drain system: (1) discharges from potable water sources (2) irrigation water (3) gravity induced groundwater (4) pumped groundwater not subject to any Regional Water Quality Control Board NPDES permit [Currently there is no pumped water that meets this Criteria]. (5) passive foundation and footing drains (6) water from crawl space pumps (7) air conditioning condensation (8) non-commercial vehicle washing (9) flows from riparian habitats and wetlands (10) dechlorinated swimming pool discharges (11) fire fighting flows and (12) **waters not otherwise containing wastes** as defined in California Water Code, Section 13050(d) and California Health & Safety Code, Section 25117.