

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO.

CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS
FOR
SACRAMENTO COUNTY AIRPORT SYSTEM
SACRAMENTO INTERNATIONAL AIRPORT TERMINAL MODERNIZATION PROJECT
DEWATERING DISCHARGE TO LAND
SACRAMENTO COUNTY

WHEREAS, Water Code Section 13260(a) requires that any person discharging wastes or proposing to discharge wastes within the region that could affect the quality of waters of the State shall file a Report of Waste Discharge (RWD); and

WHEREAS, Sacramento County Airport System (hereafter referred to as "Discharger"), submitted a RWD for the discharge of extracted groundwater to support construction of the Sacramento International Airport Terminal Modernization Project on 10 September 2007; and

WHEREAS, the Discharger has submitted the required RWD for the discharge of dewatering waste to land during construction of the Terminal Modernization Project; and

WHEREAS, the entire project site, including the dewatering discharge area, encompasses portions of Sections 24, 25, and 36, T10N, R3E and Sections 19, 30, and 31, T10N, R4E MDB&M, and is depicted on Attachment A, which forms part of this resolution by reference; and

WHEREAS, the dewatering discharge area ("designated disposal area") is owned by the Discharger, and consists of approximately 130 acres on Assessors Parcel Numbers 201-0280-060, 201-0280-063, and 201-0291-026. The net available discharge area is approximately 100 acres with implementation of setbacks and buffers need to protect sensitive plant and wildlife species. The designated disposal area is depicted on Attachment B, which forms part of this resolution by reference; and

WHEREAS, shallow groundwater will be extracted through a series of six or more shallow wells spaced at approximately 25 feet on center within the dewatering area and discharged to the designated disposal area (Attachment B) for percolation; and

WHEREAS, dewatering wells will be approximately 25 feet deep to provide dewatering to a depth of 20 feet below ground surface. Well permits will be obtained from the Sacramento County Environmental Management Department; and

WHEREAS, the expected dewatering discharge rates will vary between approximately one to two gallons per minute (gpm) per well, for an estimated total discharge of 17,200 gallons per day (gpd) year round; and

WHEREAS, dewatering is expected to begin in June 2008 and end by November 2009; and

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WHEREAS, extracted groundwater will be conveyed approximately 1.4 miles by a temporary pipeline (primarily above-ground) to a closed top above ground storage tank with an approximate capacity of 20,000 gallons at the designated disposal area. From there, the water will be land applied using sprinkler irrigation methods at a hydraulic rate that does not exceed the evaporation and percolation ability of the soil.

WHEREAS, the sprinkler system will be a mobile agricultural irrigation system designed to irrigate at least 0.4 acres at one time. The irrigation system will be moved around the designated disposal area as needed to prevent ponding.

WHEREAS, ponds will not be used and no new containment berms will be constructed within the designated disposal area. The disposal area is low relative to the existing berms that separate it from a surrounding drainage ditch system. Management of discharge rates and schedules will be used to contain the water at all times. If necessary due to extreme precipitation conditions, temporary berms will be constructed as needed to prevent discharges outside of the designated disposal area; and

WHEREAS, shallow groundwater is typically 13 to 20 feet below the surrounding grade at the airport site. Local groundwater flow is generally towards the southeast; and

WHEREAS, the Discharger completed shallow aquifer testing and developed a groundwater model to estimate the number and spacing of dewatering wells and associated pumping rates to sustain the localized groundwater drawdown required to complete construction; and

WHEREAS, based on limited groundwater monitoring data from two groundwater samples obtained in March and April 2007, shallow groundwater quality contains approximately 1,410 mg/L of dissolved solids, 350 mg/L of chloride, 290 mg/L of sulfate, and 850 mg/L of total hardness. The salinity may be due, in part, to agricultural land uses in the area; and

WHEREAS, volatile organic compounds, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), and pesticides were not detected in the groundwater samples from the dewatering area. Semi-volatile organic compounds were not detected, with the exception of dioxins and furans, which were detected at concentrations below the laboratory reporting limit. The reported dioxin and furan concentrations, when converted to their respective 2,3,7,8-TCDD equivalents, indicate a total equivalent 2,3,7,8-TCDD concentration of 3.3 picograms per liter (pg/L). The applicable groundwater limit for 2,3,7,8-TCDD is 0.27 pg/L. However, because the results were reported at concentrations below the reporting limit, the results are only estimates. Furthermore, such low concentrations, if valid, could be the result of sampling or analytical error; and

WHEREAS, groundwater samples from the designated disposal area were not tested, but there is no reason to believe that the shallow groundwater quality below the designated disposal area is better than that below the dewatering area; and

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WHEREAS, the RWD included an operation and maintenance plan that includes automatic shut-off controls to prevent overfilling the storage tank, an alarm system to warn operators of pump failure and reduced pipeline pressure, and daily discharge area inspections; and

WHEREAS, the RWD includes backup disposal plans that will be implemented as needed during construction. These include using the water for dust control during construction and to supplement the existing landscape irrigation supply; and

WHEREAS, the RWD included a water balance that demonstrates adequate disposal capacity for up to 100,000 gpd on average using a reasonably conservative numerical model that considers extreme precipitation events and normal evaporation and percolation rates; and

WHEREAS, on 7 August 2007, the County of Sacramento approved a Final Environmental Impact Report for the Sacramento International Airport Master Plan. No mitigation measures related to water quality were included in the FEIR. The Regional Water Board is a responsible agency under the California Environmental Quality Act and concurs with the FEIR's conclusions with respect to water quality impacts. Compliance with the conditions of this Resolution will prevent significant impacts to water quality; and

WHEREAS, surface water drainage from the project site is to the Sacramento River; and

WHEREAS, the designated beneficial uses of the of the Sacramento River between the Colusa Basin Drain and the "I" Street Bridge are municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm and cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; wildlife habitat, and navigation; and

WHEREAS, the designated beneficial uses of the groundwater are municipal and domestic supply, agricultural supply, and industrial service supply; and

WHEREAS, the Regional Water Quality Control Board, Central Valley Region (Regional Water Board) has a statutory obligation to prescribe waste discharge requirements except where a waiver is not against the public interest; and

WHEREAS, the Regional Water Board has determined that due to the fact that shallow groundwater will be extracted from, and discharged back into, the same aquifer with low to moderate potential for evapoconcentration in or near the same area from which it was extracted, the discharge poses little or no threat to water quality if the discharge is temporary and water is discharged under conditions that prevent discharge to surface water; and

WHEREAS, Section 13267(b) of the California Water Code provides that: *"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who*

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proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports"; and

WHEREAS, The reports required by attached Monitoring and Reporting Program No. ___ are necessary to ensure compliance with this Resolution. The Discharger owns and operates the facility that discharges the waste subject to this Order; and

WHEREAS, the Regional Water Board held a hearing on ___ in Rancho Cordova, California and considered all evidence concerning this matter:

RESOLVED, that the California Regional Water Quality Control Board, Central Valley Region waives waste discharge requirements for the Sacramento International Airport Terminal Modernization Project dewatering discharge, subject to the following conditions:

Discharge Prohibitions

1. Discharge of extracted groundwater to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as "hazardous" as defined in 27 CCR Section 20164 is prohibited.
3. Bypass or overflow of extracted groundwater from the designated disposal area shown on Attachment B is prohibited.

Discharge Specifications:

1. The daily discharge flow shall not exceed 100,000 gallons per day as a 30-day average.
2. The volume of water applied to the designated discharge area on any single day shall not exceed the percolation capacity of the soil based on soil type, pre-discharge soil moisture conditions, and weather conditions.
3. Water used for dust control or landscape irrigation shall be applied using appropriate methods and rates to prevent runoff into storm drain systems and other surface water drainage courses.

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- 4. The discharge shall not cause a condition of pollution or nuisance as defined by the California Water Code, Section 13050.
- 5. Objectionable odor originating at the discharge areas shall not be perceivable beyond the limits of those areas.
- 6. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
- 7. Storm water best management practices, as described in Storm Water Pollution Prevention Plan, shall be implemented around the discharge areas at all times.
- 8. This waiver expires on 30 June 2012. The Discharger must submit a RWD at least 120 days before the expiration date to obtain a new waiver if they wish to continue the discharge after the expiration date.

Provisions

- 1. Pursuant to Section 13267 of the California Water Code, the Discharger shall comply with the monitoring and reporting requirements prescribed in Monitoring and Reporting Program No. ___. In so doing, the Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and made part of this Order by reference.

RESOLVED, that this action waving waste discharge requirements is conditional and may be terminated at any time prior to 30 June 2012.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a true, full, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on ___.

PAMELA C. CREEDON, Executive Officer

Attachments: Monitoring and Reporting Program
 A – Vicinity Map
 B – Site Plan
 Standard Provisions and Reporting Requirements