



California Regional Water Quality Control Board Central Valley Region

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1 February 2008

CERTIFIED MAIL
7006 0810 0002 9651 4498

Mr. Greg Rowe
Sacramento County Airport System
6900 Airport Boulevard
Sacramento, CA 95837

NOTICE OF ADOPTION
OF
RESOLUTION WAIVING WASTE DISCHARGE REQUIREMENTS
FOR
SACRAMENTO COUNTY AIRPORT SYSTEM
SACRAMENTO INTERNATIONAL AIRPORT TERMINAL MODERNIZATION PROJECT
DEWATERING DISCHARGE TO LAND
SACRAMENTO COUNTY

Resolution No. R5-2008-0019 for the Sacramento International Airport Terminal Modernization Project Dewatering Discharge to Land was adopted by the California Regional Water Quality Control Board, Central Valley Region, at its 25 January 2008 meeting.

Although the Resolution waives waste discharge requirements (WDRs), the waiver is conditional. Additionally, the Resolution includes a Monitoring and Reporting Program (MRP) that contains specific monitoring requirements that Sacramento County Airport System must implement. Please review the Resolution and MRP closely to ensure compliance with the conditions and monitoring requirements. A copy of the Resolution must be maintained at the construction site and must be accessible to anyone managing the dewatering operations and discharge.

In order to conserve paper and reduce mailing costs, a paper copy of the Resolution has been sent only to the Discharger. Interested parties are advised that the full text is available on the Regional Water Board's web site at

http://www.waterboards.ca.gov/rwqcb5/adopted_orders.

Anyone without access to the Internet who needs a paper copy of the Resolution can obtain one by calling Regional Water Board staff.

California Environmental Protection Agency

If you have any questions regarding the waiver Resolution, please call Anne Olson at (916) 464-4740.

MARY E. SERRA, P.E. Chief
Waste Discharge to Land Unit

Enclosures Resolution No. R5-2008-0019
Standard Provisions and Reporting Requirements

cc w/o enc: Lori Okun, Office of Chief Counsel, State Water Board, Sacramento
Gordon Innes, Division of Water Quality, State Water Board, Sacramento
Department of Fish and Game, Rancho Cordova
Terry Macaulay, Department of Public Health, Sacramento
Steve Kalvelage, Sacramento County Environmental Management
Department, Sacramento
Peter Hudson, Environmental Science Associates, San Francisco

alo:2/22/08

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2008-0019

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*

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. R5-2008-0019 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 25 January 2008 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. R5-2008-0019. 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 25 January 2008.

PAMELA C. CREEDON, Executive Officer

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

ALO: 1/25/08

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2008-0019
FOR

SACRAMENTO COUNTY AIRPORT SYSTEM
SACRAMENTO INTERNATIONAL AIRPORT TERMINAL MODERNIZATION PROJECT
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This Monitoring and Reporting Program (MRP) describes requirements for monitoring reclaimed water and reclaimed water reuse areas. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

DESIGNATED DISCHARGE AREA MONITORING

The Discharger shall monitor the dewatering discharge areas in accordance with the following. Monitoring shall be performed at least weekly and the results shall be included in the monthly monitoring report. Erosion, ground saturation, the effectiveness of containment berms and levees, and nuisance conditions shall be evaluated weekly and discussed in the report. The discharge shall also be monitored to estimate hydraulic loading rates.

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Flow from extraction wells to each discharge area ¹	gallons and inches	Estimation	Daily	Monthly
Rainfall	Inches	Measurement	Daily	Monthly
Net acreage receiving the discharge ¹	Acres	Estimation	Daily	Monthly
Evidence of discharge outside the designated disposal area	Present or Absent		Daily	Monthly

¹ Specific discharge areas shall be identified on a scaled map.

OTHER DISCHARGE AREA MONITORING

The Discharger shall monitor use of dewatering groundwater for dust control and landscape irrigation in accordance with the following. Monitoring shall be performed daily and the results shall be included in the monthly monitoring report. Erosion, ground saturation, and runoff shall be evaluated weekly and discussed in the report. The discharge volume shall also be monitored.

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Volume used for dust control	gallons	Estimation	Daily	Monthly
Volume used for landscape irrigation	gallons	Estimation	Daily	Monthly
Rainfall	inches	Measurement	Daily	Monthly
Evidence of discharge outside the use area	Present or Absent		Daily	Monthly

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date and monitoring results are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with the conditions of Resolution No. R5-2008-0020. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Water Board.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Water Board on the **1st day of the second month following monitoring** (i.e. the January Report is due by 1 March). At a minimum, the monthly monitoring reports shall include the results of dewatering discharge area monitoring, as specified above.

B. Annual Report

An Annual Report shall be prepared after each year and after completion of the project. The Annual Report shall include all monitoring data required in the monthly schedule, and shall be submitted to the Regional Water Board by **1 February each year**. In addition to the data normally presented, the Annual Report shall include the following:

1. Tabular and graphical summaries of all data collected during the year.
2. An evaluation of the discharge areas and discussion of any structural or operational improvements needed for future use of these areas.
3. A discussion of compliance and the corrective action taken.
4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

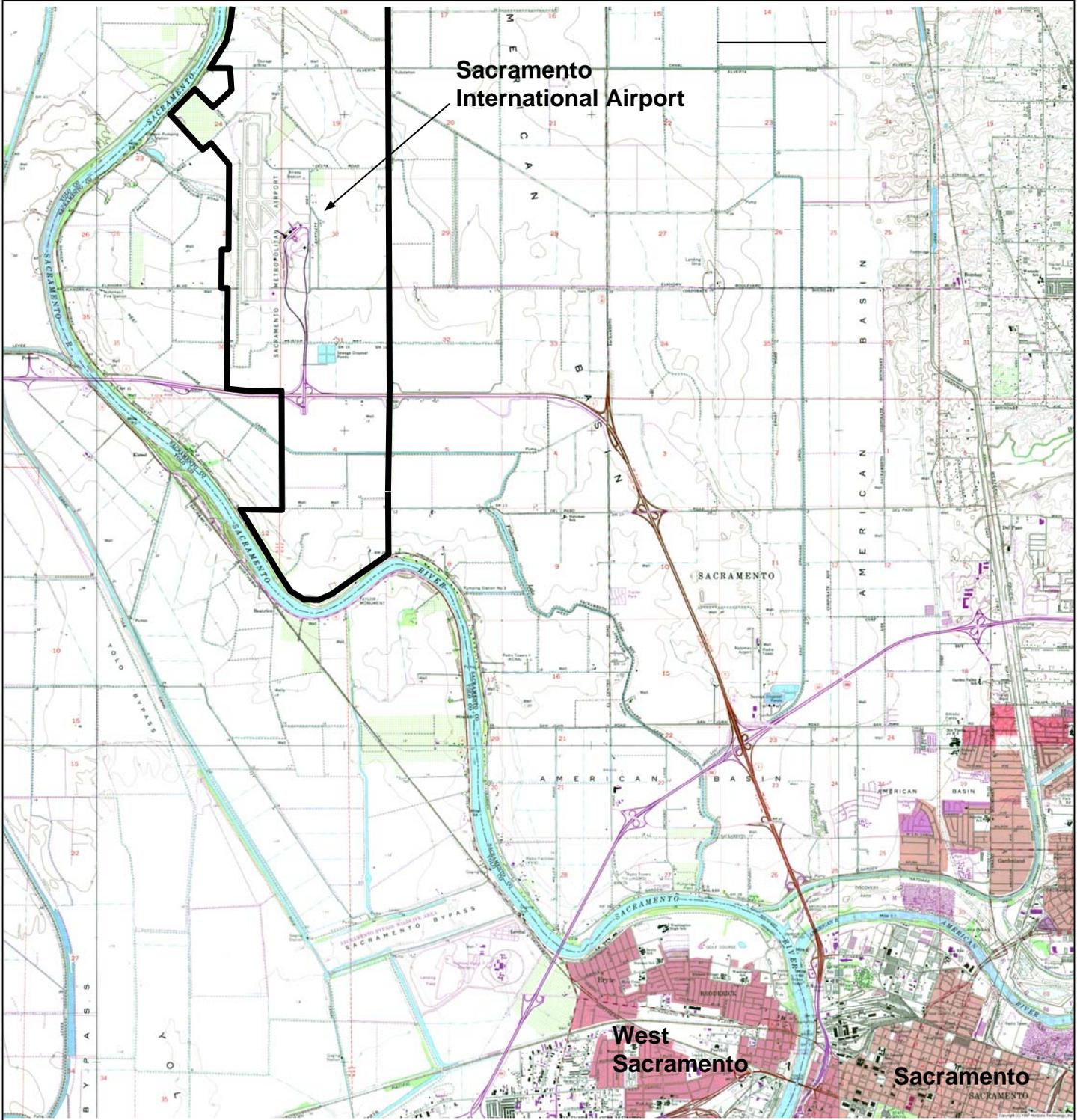
A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of all problems found during the reporting period, and actions taken or planned for correcting them, such as operation or facility modifications. If the Dischargers have previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agents, as described in the Standard Provisions General Reporting Requirements Section B.3.

The Discharger shall implement the above monitoring program as of the date of this Resolution.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

_____ 25 January 2008
(Date)

ATTACHMENT A



Drawing Reference:
USGS 7.5 min. quad
map, Sacramento East

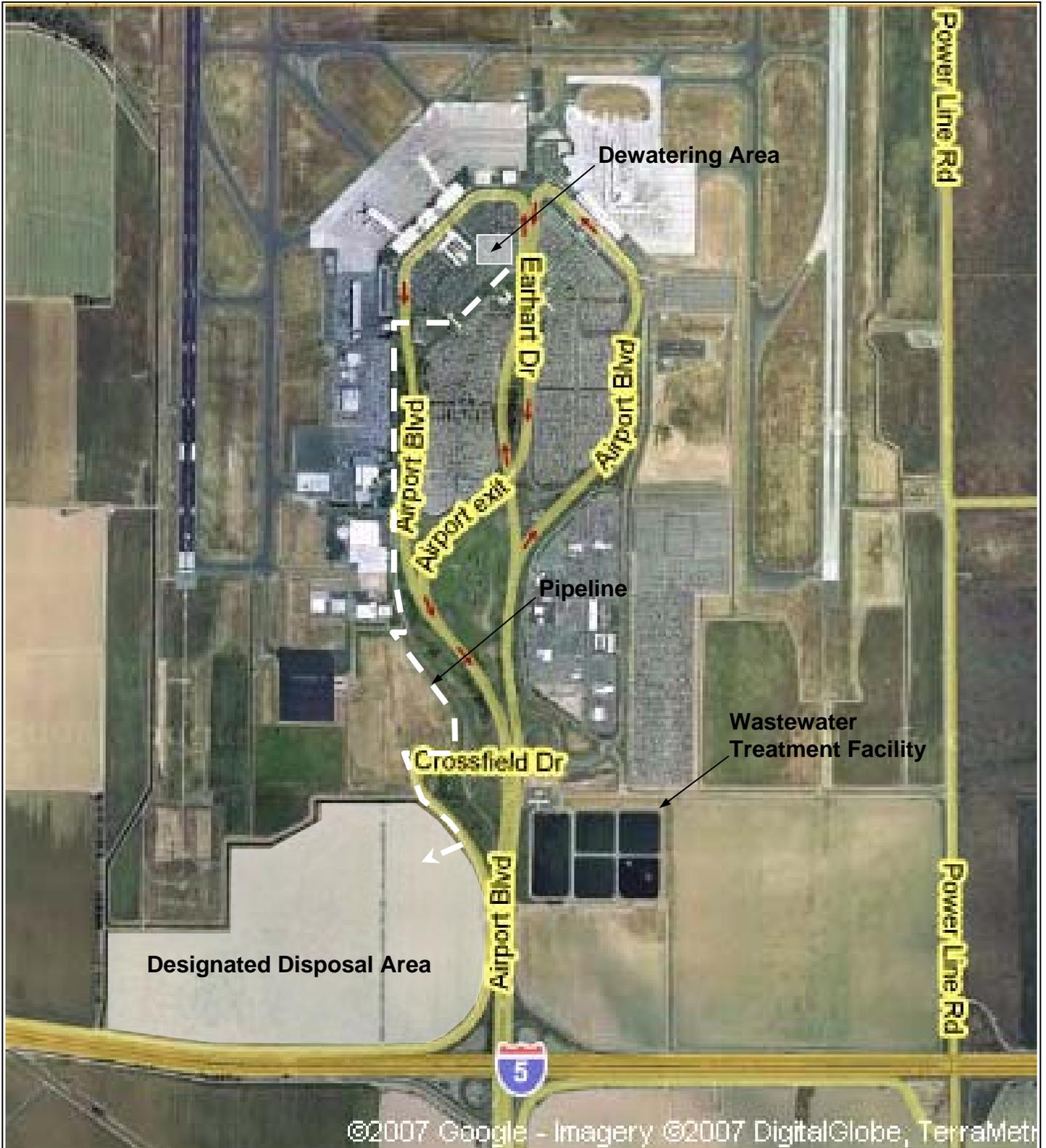
VICINITY MAP
SACRAMENTO COUNTY AIRPORT SYSTEM
SACRAMENTO INTERNATIONAL AIRPORT TERMINAL
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SACRAMENTO COUNTY

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Approx. Scale:
1' = 7,000 feet

ATTACHMENT B



Drawing Reference:
Report of Waste
Discharge,
Environmental Science
Associates, September
2007

SITE PLAN
SACRAMENTO COUNTY AIRPORT SYSTEM
SACRAMENTO INTERNATIONAL AIRPORT TERMINAL
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1,000 Feet