California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2004-0033

NPDES No. CA 0111007

Waste Discharge Requirements
for the
United States Air Force
March Air Reserve Base
Storm Water Runoff
Riverside County, California

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board) finds that:

1. On October 7, 2003, the United States Air Force, March Air Reserve Base (MARB), (hereinafter discharger) submitted a Report of Waste Discharge (ROWD) for NPDES permit renewal for the discharge of storm water from its facility. Additional information to complete the application was submitted on March 12, 2004. Discharges from the facility are currently regulated under Order No. 99-6, NPDES No. CA 0111007, which expired on April 1, 2004. Order No. 99-6 was administratively extended on March 30, 2004.

2. The facility was realigned from an active duty Air Force Base to a reserve base on April 1, 1996. There are a number of occupants carrying out activities at MARB. These occupants include, but are not limited to, the 452nd Air Mobility Wing (AMW), the California Air National Guard Air Refueling Wing and an alert unit, the 63rd Regional Readiness Command and the U.S. Customs Service. The 452nd AMW is headquartered at MARB. The duties of the 452nd AMW are to maintain the capability to conduct air-refueling operations, to transport materials and troops, to provide training in support of aviation activities and other mission objectives of the Department of Defense. The duties of the California Air National Guard are similar to those of the 452nd AMW, with an additional duty to provide assistance to the State of California by responding to state emergencies upon the Governor's request. The 63rd Regional Readiness Command maintains combat-ready operational capabilities in the areas of vehicle and equipment maintenance and storage services in the cantonment area. The U.S. Customs Service provides aerial and ground traffic surveillance, interdiction of aircraft engaged in smuggling and assistance to other law enforcement agencies upon request.

3. The discharger currently operates and maintains approximately 40 aircraft at the facility. The aircraft, vehicle, and facility maintenance operations require the on-site storage and use of fuels (jet fuel, gasoline, diesel), solvents, oils and other hazardous materials. These operations generate approximately

an average of 290,000 pounds per year of hazardous wastes that are stored at the site prior to proper disposal.

4. The facility is included in the National Priority List (Superfund List) because of problems resulting from past waste disposal practices at the site. A number of contaminated areas within the site are currently undergoing cleanup.

5. The facility is located adjacent to the Escondido Freeway (Interstate 215) in Riverside County (Sections 12-15, 22-26, T3S, R4W, and Sections 18, 19, and 30, T3S, R3W, SBB&M). The location of the facility is shown on Attachment "A", which is hereby made a part of this order. The facility occupies approximately 2,300 acres (the cantonment area). Areas that were formerly part of the Air Force Base and are outside the cantonment area are now under the jurisdiction of the Air Force Real Property Agency, the City of Moreno Valley and the March Joint Powers Authority.

6. Order No. 99-6, NPDES No. CA 0111007, was issued to the discharger for the discharge of storm-induced runoff from the facility. Order No. 99-6 regulated three discharge points: Discharge Serials No. 001, 002 and 003. The base realignment changed the base boundaries; consequently, this Order includes a redefinition of Discharge Serials No. 001, 002 and 003, and an additional discharge point Discharge Serial No. 004 (see Finding 7, below).

7. Storm water runoff from the cantonment area includes drainage from administrative facilities and maintenance hangers, fuel distribution facilities, the runway, taxiway, and aircraft parking apron surfaces where aircraft use, fueling, and maintenance activities occur, and the vegetated areas adjacent to paved aircraft usage areas. There are four major storm water discharge points from MARB, as indicated on Attachment "A" of the order and described below. These discharge points were selected from others to provide adequate representation of the storm water runoff from the base drainage with emphasis on industrial areas and airport facilities. The map in Attachment "A" shows the locations of the four discharge points.

   **Discharge Serial No. 001**: The tributary area to Discharge Serial No. 001 includes runoff from the former base housing area (known as Arnold Heights) west of the Escondido Freeway (Interstate 215) and north of Van Buren Boulevard and portions of the right-of-way of Interstate 215. Runoff is conveyed to the east side of MARB via a system of storm drain pipes and open channels to discharge to the Perris Valley Storm Drain. A large open basin functioning as an oil/water separator is located adjacent to the open channel just upstream of the discharge point to the Perris Valley Storm Drain. Under low flow conditions, a low weir in the open channel diverts flow to the oil/water separator. A floating skimmer collects and pumps floating oil and grease into a holding tank for storage and proper disposal. Under high flow conditions, storm water flows over the weir and directly into the Perris

Valley Storm Drain, which is tributary to the San Jacinto River, Reach 3. This Order requires implementation of effective BMPs[1] to control non-storm water discharges, including monitoring. Discharge Serial No. 001 is located at latitude 33°52'59"N, longitude 117°14'40"W.

**Discharge Serial No. 002**: Discharges to Discharge Serial No. 002 originate from the balance of the aircraft parking apron not tributary to Discharge Serial No. 001, including the administrative facilities and maintenance hangars adjacent to Graeber Street and bounded by the Base Operations Tower. Storm water from Discharge Serial No. 002 joins with runoff originating from administrative, lodging and commercial facilities south of Meyer Drive and runoff originating from off-base area outside the base northern boundary. This flow is ultimately conveyed eastward via a system of pipes and open channels that merge with Heacock Channel in the vicinity of 8th Street and the base eastern boundary. Heacock Channel is tributary to the Perris Valley Storm Drain, which in turn is tributary to the San Jacinto River, Reach 3. Discharge Serial No. 002 is located at latitude 33°53'34"N, longitude 117°15'09"W.

**Discharge Serial No. 003**: Discharges to Discharge Serial No. 003 originate from the runway and taxiways, and the vegetated areas adjacent to the runway and taxiways. Runoff is conveyed generally by shallow swale, open channel or pipe culvert to the southeasterly corner of MARB, where it enters a ditch adjacent to Heacock Avenue and eventually intersects the Oleander Avenue Channel. Storm water then flows south toward the intersection of Oleander Channel. It then turns eastward and discharges to the Perris Valley Storm Drain Lateral B that is tributary to the San Jacinto River, Reach 3. This discharge point is located at latitude 33°51'45"N, longitude 117°14'38"W.

**Discharge Serial No. 004:** Storm water runoff tributary to Discharge Serial No. 004 originates from maintenance facilities, visitor lodging quarters, and administrative offices west of Travis Avenue and north of Graeber Street and Meyer Drive. Runoff is conveyed generally by pipe culvert to the open channel paralleling Meyer Drive. The open channel is tributary to the Heacock Channel, which is tributary to the Perris Valley Storm Drain, which in turn is tributary to the San Jacinto River, Reach 3. Discharge Serial No. 004 is located at latitude 33°54'10" N, longitude 117°15'24" W.

8. A Water Quality Control Plan (Basin Plan) became effective on January 24, 1995. The Basin Plan contains beneficial uses and water quality objectives for waters in the Santa Ana Region.

9. The requirements contained in this order are necessary to implement the Water Quality Control Plan.

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[1] BMP is defined as best management practice.

10. Discharge Serials No. 001, 002, 003 and 004 overlie the Perris-North Groundwater Subbasin, the beneficial uses of which include:

    a. Municipal and domestic supply,
    b. Agricultural supply,
    c. Industrial process supply, and
    d. Industrial service supply.

11. Discharges to the Perris Valley Storm Drain can also affect the Perris-South I and Perris-South II Groundwater Subbasins, the beneficial uses of which include:

    a. municipal and domestic supply, and
    b. agricultural supply.

12. Discharges from this facility are tributary to the San Jacinto River, Reach 3, the intermittent beneficial uses of which include:

    a. Agricultural supply,
    b. Groundwater recharge,
    c. Warm freshwater habitat,
    d. Water contact recreation,
    e. Non-contact water recreation, and
    f. Wildlife habitat.

13. The San Jacinto River, Reach 3 is tributary to the San Jacinto River, Reach 2 (Canyon Lake) which has beneficial uses including:

    a. Municipal and domestic supply,
    b. Agricultural supply,
    c. Groundwater recharge,
    d. Water contact recreation,
    e. Non-contact water recreation,
    f. Warm freshwater habitat, and
    g. Wildlife habitat.

14. Discharges from this facility drain to Canyon Lake, which overflows to Lake Elsinore, both of which are 303d listed, impaired waterbodies (listed for several pollutants). Total Maximum Daily Load (TMDL) requirements will be developed for these waterbodies. This Order will be reopened if and as warranted to incorporate requirements necessary to implement these TMDLs.

15. This order implements Section 402(p) of the Clean Water Act for storm water discharges in accordance with the final rules published by USEPA on November 16, 1990 (40 CFR Parts 122, 123 and 124).

16. In accordance with California Water Code Section 13389, the issuance of waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.

17. Effluent limitations and new source performance standards established pursuant to the Clean Water Act and amendments thereto are applicable to this discharge.

18. The Regional Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16 and finds that this discharge is consistent with those provisions.

19. The Regional Board has notified the discharger and other interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.

20. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE SPECIFICATIONS

1. The discharge of wastes at Discharge Serials No. 001, 002, 003 and 004 containing constituent concentrations in excess of the following limits is prohibited:

| Constituents | Maximum Daily Concentration Limit[2] (mg/l) |
|---|---|
| Total Suspended Solids | 75 |
| Oil and Grease | 15 |
| Methylene Blue Active Substances | 0.5 |

2. The pH of the discharge shall be at all times within the range of 6.5 and 8.5 pH units.

3. The discharge shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.

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[2] The "maximum daily" concentration is defined as the measurement made on any single grab sample or composite sample.

4. The effluent shall be deemed to cause acute toxicity when the toxicity test of 100% effluent as required in Monitoring and Reporting Program No. R8-2003-0033, results in failure of the test as determined using the pass or fail test protocol specified in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA-821-R-02-012), Fifth Edition, October 2002.

B. RECEIVING WATER LIMITATIONS

1. The discharge shall not result in acute toxicity in ambient receiving waters.

2. The discharge shall not result in coloration of the receiving water which causes a nuisance or adversely affects beneficial uses.

3. The discharge shall not cause the deposition of objectionable bottom deposits along the banks or the bottom of the stream channel.

4. The discharge shall not cause visible oil, grease, scum, floating or suspended material or foam in the receiving water.

5. The discharge shall not cause the receiving water to have an objectionable odor.

6. The discharge shall not cause the concentration of toxic pollutants in the water column sediments, or biota to adversely affect beneficial uses of the receiving water.

7. The discharge shall not result in degradation of inland surface water communities and populations, including vertebrate, invertebrate and plant species.

8. The natural taste and odor of fish, shellfish, or other inland surface water resources used for human consumption shall not be impaired as a result of the discharge.

9. Storm water discharges from MARB to any surface or groundwaters shall not adversely impact human health or the environment. Storm water discharges and authorized non-storm water discharges[3] shall not cause or contribute to an exceedance of any applicable water

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[3] Examples of authorized non-storm water discharges are runoff from ornamental irrigation, air conditioning condensate, etc. However, offsite runoff from ornamental irrigation shall not contain total chlorine concentration at or above 1 mg/l. See 40 CFR Part 122.26(d)(2)(iv)(B)(1) for a complete list.

quality standards contained in a Statewide Water Quality Control Plan or the Regional Board's Basin Plan (see also Provision C.18).

C. PROVISIONS

1. This Order shall become effective upon its adoption. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the CWA, or amendments thereto. The NPDES permit shall become effective 10 days after the date of adoption provided the Regional Administrator of the USEPA has no objection. If the Regional Administrator objects to its issuance, this Order shall not serve as an NPDES permit until such objection is withdrawn.

2. Storm water and authorized non-storm water discharges from the facility shall not cause or threaten to cause pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code.

3. This Order expires on August 1, 2009, and the discharger must file a report of waste discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

4. All applications, reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR Part 122.22.

5. Order No. 99-6 is hereby rescinded.

6. The discharger shall comply with Monitoring and Reporting Program No. R8-2004-0033, as ordered by the Executive Officer. This monitoring and reporting program may be modified by the Executive Officer at any time during the term of this Order, and may include an increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected. If the Executive Officer requires any increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected, the Executive Officer can also authorize reductions in this monitoring to the levels specified in the original monitoring and reporting program.

7. The discharger must reduce or prevent the discharge of pollutants associated with the operation of MARB in storm water discharges and authorized non-storm water discharges[4] through implementation

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See footnote 3.

of best available technology economically achievable (BAT) for toxic and non-conventional pollutants and best available pollution control technology (BCT) for conventional pollutants. Development and implementation of a storm water pollution prevention plan (SWPPP) that complies with the requirements in Attachment "B" of this Order and includes best management practices (BMP) that achieve BAT/BCT constitutes compliance with this requirement.

8. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

9. The discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any limitation specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliant discharge.

10. The discharger shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement.

11. Within twelve months from the date of adoption of this Order, the discharger must review the SWPPP for the facility and update any items in need of improvement. The update shall at a minimum include pertinent sections of Attachment "B", Storm Water Pollution Prevention Plan, which is hereby made a part of this Order.

12. All storm water discharges from the facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other courses under their jurisdiction.

13. The discharge of wastes to property not owned or controlled by the discharger, except as covered in this Order, is prohibited.

14. In the event of any change in control or ownership of land or waste discharge facilities currently controlled or owned by the discharger, the discharger shall notify the succeeding operator or owner of the existence of this Order by letter, a copy of which shall be forwarded to this Regional Board.

15. This Order is not transferable to any person except after notice to and approval by the Regional Board. The Regional Board may require modification or revocation and reissuance of this Order to change the

name of the discharger and to incorporate such other requirements as may be necessary under the Clean Water Act.

16. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for modification, revocation and reissuance, or termination of this Order or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

17. This Order may be reopened and modified prior to the expiration date to include effluent limitations for pollutants determined to be present in significant amounts in the discharge, to incorporate pertinent requirements based on changes in water quality standards, and/or to incorporate requirements necessary to implement relevant TMDLs.

18. The discharger will not be in violation of B. Receiving Water Limitations as long as the discharger has implemented BMPs that achieve BAT/BCT and the following procedure is followed:

    a. The discharger shall submit a report to the Executive Officer of the Regional Board that describes the BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The report shall include an implementation schedule. The Executive Officer may require modifications to the report.

    b. Following approval of the report described above by the Executive Officer, the discharger shall revise its SWPPP and monitoring program to incorporate the additional BMPs that have been and will be implemented, the implementation schedule and any additional monitoring required.

19. The Regional Board, USEPA, and other authorized representatives shall be allowed:

    a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;

    b. Access to copy any records that are kept under the conditions of this Order;

    c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. To photograph, sample and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the Clean Water Act.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 17, 2004.

Gerard J. Thibeault
Executive Officer

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. R8-2004-0033

NPDES No. CA 0111007
for
United States Air Force
March Air Reserve Base
Storm Water Runoff
Riverside County, California

## A. MONITORING GUIDELINES

Monitoring shall be in accordance with the following:

1. All sampling and sample preservation shall be in accordance with the current edition of "*Standard Methods for the Examination of Water and Wastewater*" (American Public Health Association).

2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 (revised as of May 14, 1999) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this monitoring and reporting program (M&RP). In addition, the Regional Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136. Unless otherwise specified herein, organic pollutants shall be analyzed using EPA method 8260, as appropriate, and results shall be reported with ML or PQL and MDL.

3. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services or EPA or at laboratories approved by the Executive Officer of the Regional Board.

4. The discharger shall conduct acute toxicity testing as specified in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA-821-R-02-012, Fifth Edition, October 2002). Using a control and 100% effluent, static renewal survival (pass/fail) tests for 96 hours shall be conducted using the water flea (*Daphnia Magna or Daphnia pulex*) for the required annual test under this permit. The effluent tests must be conducted concurrent with reference toxicant tests. The effluent and reference toxicant tests must meet all test acceptability criteria as specified in the acute

manual[1]. If the test acceptability criteria are not achieved, then the discharger must re-sample and re-test within 14 days, or upon the occurrence of the next qualifying rain event. The test results must be reported according to the acute manual chapter on Report Preparation, and shall be attached to the monitoring reports. The use of alternative methods for measuring acute toxicity may be considered by the Executive Officer on a case-by-case basis.

5. Whenever the discharger monitors any pollutant more frequently at the discharge points than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.

6. The discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Board at any time. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;

   b. The individual(s) who performed the sampling, and/or measurements;

   c. The date(s) analyses were performed;

   d. The individual(s) who performed the analyses;

   e. The analytical techniques or methods used, including any modification to those methods;

   f. All sampling and analytical results, including

      1) units of measurement used;
      2) minimum reporting limit for the analysis (minimum level, practical quantitation level (PQL));
      3) results less than the reporting limit but above the method detection limit (MDL);
      4) data qualifiers and a description of the qualifiers;
      5) quality control test results (and a written copy of the laboratory quality assurance plan);
      6) dilution factors, if used; and
      7) sample matrix type; and

   g. All monitoring equipment calibration and maintenance records;

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1 *"Acute manual" refers to protocols described in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" (EPA-821-R-02-012, Fifth Edition, October 2002).*

h. All original strip charts from continuous monitoring devices;

i. All data used to complete the application for this Order; and,

j. Copies of all reports required by this Order.

7. Discharge monitoring data shall be submitted in a format acceptable to the Regional Board. Specific reporting format may include preprinted forms and/or electronic media. Unless otherwise specified, discharge flows shall be reported in terms of daily average discharge flows. The results of all monitoring required by this Order shall be reported to the Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order.

8. The discharger shall deliver a copy of each monitoring report in the appropriate format to:

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

## B. EFFLUENT MONITORING

1. Appropriate sampling locations shall be established for each point of discharge and shall be located where representative samples of the discharge to the Perris Valley Storm Drain, Heacock Channel and Oleander Avenue Channel can be obtained.

2. Each discharge point shall be inspected on a regular basis to determine if any illegal or illicit discharge is occurring. At a minimum, these inspections shall be done on a monthly basis. Whenever any discharge is observed, the flow shall be estimated and recorded in a permanent log. The discharger shall include an explanation for any dry-weather discharge.

3. The following shall constitute the effluent monitoring program for Discharge Serials No. 001, 002, 003 and 004:

| Constituents | Units | Minimum Frequency of Sampling & Analysis |
|---|---|---|
| Flow | gpd (estimated) | Twice annually during rainy season |
| PH | pH Units | " |
| Total Suspended Solids | mg/l | " |

| Constituents | Units | Minimum Frequency of Sampling & Analysis |
|---|---|---|
| Oil and Grease | " | " |
| Methylene Blue Active Substances (MBAS) | mg/l | " |
| Total Petroleum Hydrocarbons | µg/l | " |
| Total Nitrogen[2] | mg/l | " |
| Total Phosphorus[2] | mg/l | " |
| Reactive Phosphorus[2] | mg/l | " |
| EPA Priority Pollutants (list attached) | µg/l | Annually during rainy season |
| Toxicity Testing | Pass/Fail | " |

4. During the wet season (October 1 through May 31), grab samples shall be collected during the first sixty minutes of any significant storm water discharge[3] at Discharge Serials No. 001, 002, 003 and 004. These samples shall be analyzed for the constituents listed under B.3., above. Sampling and analysis are required for two qualifying storm events during the wet season, including the first qualifying storm event of the wet season, unless otherwise specified.

5. Only storms having intervening periods of, at least, seventy-two hours of dry weather need to be sampled for the constituents listed in B.3., above. If the first sixty minutes of rain occurs during night or non-working hours where sampling would be dangerous, no sampling is required unless automatic samplers are available.

## C. REPORTING

1. The results of the above analyses and any prohibited discharge or accidental discharge shall be reported to the Regional Board within 24 hours of finding any discharge that is in violation of the discharge specifications.

2. Monitoring reports shall be submitted on a semi-annual basis. The reports are due on April 30 and October 30 of each year and shall include the following:

   a. The results of all chemical analyses for the monitoring period.

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[2] The data collected in the first year will be evaluated by the Executive Officer to determine if continued sampling is warranted and appropriate for the remainder of the permit term.

[3] A significant storm water discharge may result from continuous rainfall of 1/10th of an inch. If a significant storm water discharge results in a continuous discharge for approximately one hour or more then sampling should be performed.

b. Estimated daily flows.

c. Estimated duration of all discharges.

d. An explanation for any dry-weather discharge.

e. A copy of all manifests specifically requested for any waste transported from the facility.

3. The discharger shall report any anticipated dry-weather or prohibited non-storm-induced discharges at Discharge Serial No. 001, 002. 003 and 004 to the Board at least 24 hours prior to its occurrence. The discharger shall report any prohibited or accidental discharges at the above-referenced discharge points to the Board within 24 hours of its occurrence. In either case, samples of the discharge must be collected at 24 hour intervals and analyzed for the constituents listed under B.3., above until the discharges cease. When the discharge continues more than seven calender days and if the sampling results indicate no problems, the sampling may be reduced to weekly until the discharge ceases.

4. If no discharge occurs during the monitoring period, a report to that effect shall be submitted in lieu of a monitoring report.

5. All reports shall be arranged in a tabular format to clearly show compliance and noncompliance with each discharge specification.

6. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

7. All reports shall be signed by a responsible officer or duly authorized representative of the discharger and shall be submitted under penalty of perjury.

Ordered by: _____
Gerard J. Thibeault
Executive Officer

September 17, 2004

California Regional Water Quality Control Board
Santa Ana Region

September 17, 2004

Statement of Basis

ITEM 5

SUBJECT: Waste Discharge Requirements for United States Air Force, March Air Reserve Base, Storm Water Runoff, Riverside County, Order No. R8-2004-0033, NPDES No. CA 0111007

DISCUSSION:

Facility Description

The United States Air Force (discharger) owns and operates March Air Reserve Base (MARB). This facility of approximately 2,300 acres (the cantonment area) is located in Moreno Valley adjacent to the Escondido Freeway (Interstate 215), as shown on Attachment "A" of the order. Currently, the primary function of MARB is to house and maintain approximately 40 aircraft used to support air-to-air refueling operations for the Department of Defense. MARB is used by the 452nd Air Mobility Wing to conduct air-refueling operations, to transport materials and troops, to provide training in support of aviation activities and other mission objectives of the Department of Defense. Other areas of the former March Air Force Base tributary to the cantonment area are now under the jurisdiction of the Air Force Real Property Agency, the March Joint Powers Authority and other entities and will not be directly affected by this Order.

Waste Discharges from the Facility

The operations at MARB require onsite storage and use of fuels (jet, gasoline, diesel), solvents, oils and other hazardous materials. These operations generate approximately 290,000 pounds per year of hazardous wastes that are stored at the site prior to proper disposal. These activities create a potential for groundwater and surface water contamination. Such contamination can occur from the accumulation of incidental fuel and oil residual on runway and apron areas, accidental spills, and unauthorized waste discharges. Storm water runoff from the facility could also come in contact with these pollutants.

In 1981, the Department of Defense developed the Installation Restoration Program (IRP) to ensure compliance with hazardous waste regulations and to determine the potential sources of contamination. The IRP identified and ranked thirty onsite waste disposal and spill sites as potential sources of contamination at MARB. These investigations led to the inclusion of MARB on the National Priority

List (Superfund List). Further investigations and remedial activities have been conducted and a number of sites are still undergoing remediation of which seven sites are located on MARB.

The sanitary wastes generated at the site are treated at the sewage treatment plant, which is regulated under Regional Board Order No. R8-2003-0113. The reclaimed water from the treatment plant is used at the Riverside National Cemetery and at General Old Golf Course. Reclaimed water use is also regulated under Order No. R8-2003-0113.

This order regulates the discharge of storm water from the site. Four sotrm water discharge points were selected to provide representation of the storm water runoff from MARB, as indicated on Attachment "A" of the Order.

*Discharge Serial No. 001:*

The tributary area to Discharge Serial No. 001 includes runoff from the former base housing area (known as Arnold Heights) west of the Escondido Freeway (Interstate 215) and north of Van Buren Boulevard, and portions of the right-of-way of Interstate 215. Storm water runoff from the cantonment area includes drainage from administrative facilities and maintenance hangars, fuel distribution facilities, the runway, taxiway, aircraft parking apron surfaces where aircraft use, fueling, and maintenance activities occur, and the vegetated areas adjacent to paved aircraft usage areas. Runoff is conveyed to the east side of MARB via a system of storm drain pipes and open channels that discharge to the Perris Valley Storm Drain. A large open basin functioning as an oil/water separator is located adjacent to the open channel just upstream of the discharge point to the Perris Valley Storm Drain. Under low flow conditions, a low weir in the open channel diverts flow to the oil/water separator. A floating skimmer collects and pumps floating oil and grease and fue, if any, into a holding tank for storage and proper disposal. Under high flow conditions, storm water flows over the weir and directly into the Perris Valley Storm Drain, which is tributary to the San Jacinto River, Reach 3. In addition to storm water runoff, Discharge Serial No. 001 may also receive discharges of water used as part of preventive maintenance and inspection activities at fuel distribution facility 1270, and from testing of the fire suppression system at hangar 1244 and hangar 2303. These discharges are not expected to contain any significant levels of pollutants and typically do not reach Discharge Serial No. 001. These discharges will not overflow under dry weather conditions. This Order requires implementation of effective BMPs[1] to control non-storm water discharges, including monitoring.

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[1] BMP is defined as best management practice.
[2] BMP is defined as best management practice.

*Discharge Serial No. 002:*

Storm water runoff tributary to Discharge Serial No. 002 originates from the balance of the aircraft parking apron not tributary to Discharge Serial No. 001, including the administrative facilities and maintenance hangars adjacent to Graeber Street and bounded by the Base Operations Tower. Storm water from Discharge Serial No. 002 joins the runoff originating from administrative, lodging and commercial facilities south of Meyer Drive, and runoff originating from off-base area outside the base northern boundary. The flow is ultimately conveyed eastward via a system of pipes and open channels that merge with Heacock Channel in the vicinity of 8$^{th}$ Street and the base eastern boundary. Heacock Channel is tributary to the Perris Valley Storm Drain, which is tributary to the San Jacinto River, Reach 3.

*Discharge Serial No. 003:*

Storm water runoff tributary to Discharge Serial No. 003 originates from the runway and taxiways and the vegetated areas adjacent to the runway and taxiways. Runoff is conveyed generally by shallow swale, open channel or pipe culvert to the southeasterly corner of MARB, where it enters a ditch adjacent to Heacock Avenue and eventually intersects the Oleander Avenue Channel. Storm water then flows south towards the intersection of Oleander Channel before turning eastward. The flow then discharges to the Perris Valley Storm Drain Lateral B that is tributary to the San Jacinto River, Reach 3

*Discharge Serial No. 004:*

Storm water runoff tributary to Discharge Serial No. 004 originates from maintenance facilities, visitor lodging quarters, and administrative offices west of Travis Avenue and north of Graeber Street and Meyer Drive. Runoff is conveyed generally by pipe culvert to the open channel paralleling Meyer Drive. The open channel is tributary to the Heacock Channel, which is tributary to the Perris Valley Storm Drain, which in turn is tributary to the San Jacinto River, Reach 3.

Existing NPDES Permit for Storm Water Discharges

The discharge of storm water from MARB is currently regulated under Regional Board Order No. 99-6, NPDES No. CA 0111007. Order No. 99-6 expired on April 1, 2004. On October 7, 2003, the discharger submitted an NPDES permit renewal application.

Beneficial Uses of the Receiving Waters

The discharge of storm water from MARB is tributary to the San Jacinto River, Reach 3. The intermittent beneficial uses of the San Jacinto River, Reach 3, include: agricultural supply, groundwater recharge, warm freshwater habitat, water contact recreation, non-contact water recreation and wildlife habitat.

The discharges overlie the Perris-North Groundwater Subbasin. The beneficial uses of this subbasin include municipal and domestic supply, agricultural, industrial process, and industrial service supply. The downstream portion of the Perris Valley Storm Drain overlies the Perris-South I and Perris-South II Groundwater Subbasins. Discharges to this storm drain can affect the beneficial uses of these two subbasins, which include municipal and domestic supply and agricultural supply.

Regulatory Basis for the Discharge Limitations

Section 402(p) of the Clean Water Act as amended by the Water Quality Act of 1987 and the related regulations published by the United States Environmental Protection Agency on November 16, 1990 (40 CFR Parts 122, 123 and 124) contain requirements for the discharge of storm water. The State Water Resources Control Board adopted a general permit for the discharge of storm water from industrial sites. The proposed order is consistent with these state and federal regulations.

The proposed order includes limitations for total suspended solids, oil and grease, pH, methylene blue active substances and toxicity.

The proposed requirements and discharge limitations contained in the order should be adequate to protect the beneficial uses of the waters of the region.

The proposed limits in this permit are based on Best Available Technology (BAT), Best Professional Judgement (BPJ), the Basin Plan and state and federal regulations.

RECOMMENDATION:

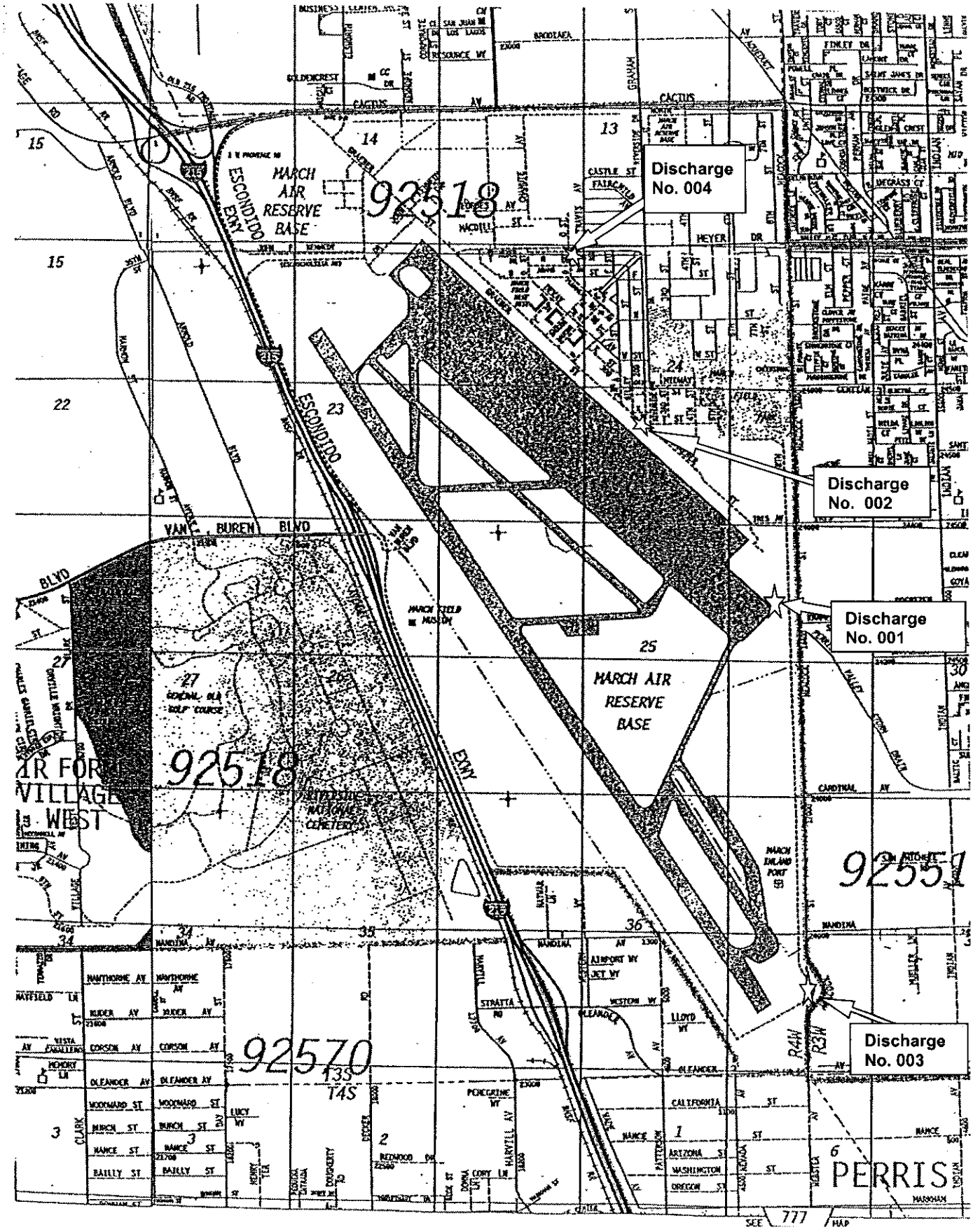
Adopt Order No. R8-2004-0033, NPDES No. CA 0111007, as presented.

In addition to the discharger, comments were solicited from the following agencies:

State Water Resources Control Board, Office of the Chief Counsel – Jorge Leon
State Water Resources Control Board, Division of Water Quality – Jim Maughan
U.S. Environmental Protection Agency, Permits Issuance Section - (W-5-1), Terry Oda
Riverside County Flood Control and Water Conservation District – Jason Uhley
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
Santa Ana River Dischargers Association - Joseph Zoba
State Department of Health Services – San Diego

State Department of Water Resources - Glendale
Riverside County Environmental Health Department – Sam Martinez
State Department of Fish and Game - Long Beach
March Joint Powers Authority Golf Course
Riverside National Cemetery
Western Municipal Water District – Norm L. Thomas
City of Moreno Valley - Kent Wegelin
City of Perris – Michael Morales
Orange County Water District - Nira Yamachika
Santa Ana Watershed Project Authority – Eldon Horst
Santa Ana River Dischargers Association - Joseph Zoba
City of Riverside Planning Department – Sandy Caldwell
Riverside County Environmental Health Department – Sam Martinez
Elsinore Valley Municipal Water District - Julius Ma
Canyon Lake Homeowner Association - Clint Warren
Eastern Municipal Water District – Anthony J. Pack

**Attachment "A" – SITE MAP**



STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

1. Implementation Schedule

A storm water pollution prevention plan (SWPPP) shall be updated and implemented in a timely manner, but in no case later than September 25, 2005.

2. Objectives

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, over-head coverage). To achieve these objectives, dischargers should consider the five phase process for SWPPP development and implementation as shown in Table A (see page 11 of 12, below).

The SWPPP requirements are designed to be sufficiently flexible to meet the various needs of the facility. SWPPP requirements that are not applicable to the facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Board inspectors.

3. Planning and Organization

a. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in the storm water Monitoring & Reporting Program No. 2004-0033. The SWPPP shall clearly identify the storm water pollution prevention related responsibilities, duties, and activities of each team member.

b. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. The discharger shall review all local, state, and federal requirements that impact, complement, or are consistent with the requirements of Order No. 2004-0033. The discharger shall identify any existing facility plans that

contain storm water pollutant control measures or relate to the requirements of Order No. 2004-0033. As examples, dischargers whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, the discharger whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

4. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-1/2 x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, the discharger may provide the required information on multiple site maps. The following information shall be included on the site map:

a. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.

b. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

c. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.

d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section 6.a.iv., below, have occurred.

e. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored,

received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. Description of Potential Pollutant Sources

a. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section 4.e., above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

i. Industrial Processes

Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the processes (manufacturing or treatment), cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

ii. Material Handling and Storage Areas

Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

iii. Dust and Particulate Generating Activities

Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

iv. Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges. Include toxic chemicals (listed in 40 Code of Federal Regulations [CFR] Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 CFR, Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure

spills or leaks do not reoccur. Such list shall be updated as appropriate during the term of Order No. 2004-0033.

v. Non-Storm Water Discharges

The discharger shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions of Order No. 2004-0033 are prohibited. (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

vi. Soil Erosion

Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

b. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B (see page 12 of 12, below). The last column of Table B, "Control Practices", should be completed in accordance with Section 8., below.

7. <u>Assessment of Potential Pollutant Sources</u>

a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in Section 6., above, to determine:

i. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and

ii. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. The discharger shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

b. The discharger shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

c. The discharger is required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8., below.

8. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections 6. and 7., above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

9. The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

10. The discharger shall consider the following BMPs for implementation at the facility:

a. Non-Structural BMPs: Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. The discharger should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section 8.b., below). Below is a list of non-structural BMPs that should be considered:

i. Good Housekeeping: Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

ii. Preventive Maintenance: Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

iii. Spill Response: This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

iv. Material Handling and Storage: This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

v. Employee Training: This includes training of personnel who are responsible for (a) implementing activities identified in the SWPPP, (b) conducting inspections, sampling, and visual observations, and (c) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

vi. Waste Handling/Recycling: This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

vii. Record Keeping and Internal Reporting: This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

viii. Erosion Control and Site Stabilization: This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

ix. Inspections: This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPP revisions are made.

x. Quality Assurance: This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

b. Structural BMPs: Where non-structural BMPs as identified in Section 8.a., above, are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

i. Overhead Coverage: This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

ii. Retention Ponds: This includes basins, ponds, surface impoundments, bermed areas, etc., that do not allow storm water to discharge from the facility.

iii. Control Devices: This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

iv. Secondary Containment Structures: This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

v. Treatment: This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., that reduce the pollutants in storm water discharges and authorized non-storm water discharges. The necessity of pretreating the storm water before infiltration to prevent carrying pollutants to groundwater shall be considered for any device that infiltrates storm water.

11. Annual Comprehensive Site Compliance Evaluation

The discharger shall conduct one comprehensive site compliance evaluation in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

a. A review of all visual observation records, inspection records, and sampling and analysis results.

b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.

c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.

d. An evaluation report that includes, (1) identification of personnel performing the evaluation, (2) the date(s) of the evaluation, (3) necessary SWPPP revisions, (4) schedule, as required in Section 10.e, below, for implementing SWPPP revisions, (5) any incidents of non-compliance and the corrective actions taken, and (6) a certification that the discharger is in compliance with Order No. 2004-0033. If the above certification cannot be provided, explain in the evaluation report why the discharger is not in compliance with this

order. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with provision C.11., of Order No. 2004-0033.

12. SWPPP General Requirements

a. The SWPPP shall be retained on site and made available upon request by a representative of the Regional Board and/or local storm water management agency (local agency) which receives the storm water discharges.

b. The Regional Board and/or local agency may notify the discharger when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Board and/or local agency, the discharger shall submit a SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the discharger shall provide written certification to the Regional Board and/or local agency that the revisions have been implemented.

c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (1) may significantly increase the quantities of pollutants in storm water discharge, (2) cause a new area of industrial activity at the facility to be exposed to storm water, or (3) begin an industrial activity which would introduce a new pollutant source at the facility.

d. The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a discharger determines that the SWPPP is in violation of any requirement(s) of Order No. 2004-0033.

e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Order No. 2004-0033, due to proposed significant structural changes, the discharger shall submit a report to the Regional Board prior to the applicable deadline that (1) describes the portion of the SWPPP that is infeasible to implement by the deadline, (2) provides justification for a time extension, (3) provides a schedule for completing and implementing that portion of the SWPPP, and (4) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Board approval and/or modifications. The discharger shall provide written notification to the Regional Board within 14 days after the SWPPP revisions are implemented.

f. The SWPPP shall be provided, upon request, to the Regional Board. The Regional Board under Section 308(b) of the Clean Water Act considers the SWPPP a report that shall be available to the public.

**TABLE A**
**FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL STORM WATER POLLUTION PREVENTION PLANS**

**PLANNING AND ORGANIZATION**

*Form pollution prevention team
*Review other plans

**ASSESSMENT PHASE**

*Develop a site map
*Identify potential pollutant sources
*Inventory of materials and chemicals
*List significant spills and leaks
*Identify non-storm water discharges
*Assess pollutant risks

**BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE**

*Non-structural BMPs
*Structural BMPs
*Select activity and site-specific BMPs

**IMPLEMENTATION PHASE**

*Train employees
*Implement BMPs
*Conduct record keeping and reporting

**EVALUATION / MONITORING**

*Conduct annual site evaluation
*Review monitoring information
*Evaluate BMPs & *Review and revise SWPPP

**TABLE B**

**EXAMPLE**

**ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES SUMMARY**

| AREA | ACTIVITY | POLLUTANT SOURCE | POLLUTANT | BEST MANAGEMENT PRACTICES |
|---|---|---|---|---|
| Vehicle & equipment fueling | Fueling | Spills and leaks during delivery | Fuel oil | - Use spill and overflow protection<br>- Minimize run-on of storm water into the fueling area<br>- Cover fueling area<br>- Use dry cleanup methods rather than hosing down area<br>- Implement proper spill prevention control program<br>- Implement adequate preventative maintenance program to prevent tank and line leaks<br>- Inspect fueling areas regularly to detect problems before they occur<br>- Train employees on proper fueling, cleanup, and spill response techniques. |
| | | Spills caused by topping off fuel oil | Fuel oil | -Keep spill kits close to pumps, use signs for reminders and train for spills. |
| | | Hosing or washing down fuel area | Fuel oil | Contain washdown water and run through a fuel/water separator. |
| | | Leaking storage tanks | Fuel oil | -Storage tanks can have secondary containment. |
| | | Rainfall running off fueling areas, and rainfall running onto and off fueling area | Fuel oil | - Rainfall on fueling area can be diverted to fuel/water separator |

## EPA PRIORITY POLLUTANT LIST

| Metals | Method |
|---|---|
| Antimony | ICP |
| Arsenic | GF/AA |
| Beryllium | ICP |
| Cadmium | ICP |
| Chromium | ICP |
| Copper | GF/AA |
| Lead | GF/AA |
| Mercury | CV/AA |
| Nickel | ICP |
| Selenium | GF/HYDRIDE |
| Silver | ICP |
| Thallium | ICP |
| Zinc | ICP |

| Miscellaneous | Method |
|---|---|
| Cyanide | 335.2/335.3 |
| Asbestos (not required unless requested) | |

| Pesticides | Method |
|---|---|
| Aldrin | 608 |
| Chlordane | " |
| Dieldrin | " |
| 4, 4' - DDT | " |
| 4, 4' - DDE | " |
| 4, 4' - DDD | " |
| Alpha Endosulfan | " |
| Beta Endosulfan | " |
| Endosulfan Sulfate | " |
| Endrin | " |
| Endrin Aldehyde | " |
| Heptachlor | " |
| Heptachlor Epoxide | " |
| Alpha BHC | " |
| Beta BHC | " |
| Delta BHC | " |
| Gamma BHC | " |
| Toxaphene | " |
| PCB 1016 | " |
| PCB 1221 | " |
| PCB 1232 | " |
| PCB 1242 | " |
| PCB 1248 | " |
| PCB 1254 | " |
| PCB 1260 | " |

| Base/Neutral Extractibles | Method |
|---|---|
| Acenaphthene | 625 |
| Acenaphthylene | " |
| Anthracene | " |
| Benzidine | " |
| Benzo (a) Anthracene | " |
| Benzo (a) Pyrene | " |
| Benzo (b) Fluoranthene | " |
| Benzo (g,h,i) Perylene | " |
| Benzo (k) Fluoranthene | " |
| Bis (2-Chloroethoxy) Methane | " |
| Bis (2-Chloroethyl) Ether | " |
| Bis (2-Chloroisopropyl) Ether | " |
| Bis (2-Ethylhexyl) Phthalate | " |
| 4-Bromophenyl Phenyl Ether | " |
| Butyl Benzyl Phthalate | " |
| 2-Chloronaphthalene | " |
| Chrysene | " |
| Dibenzo (a,h) Anthracene | " |
| 4-Chlorophenyl Phenyl Ether | " |
| 1,2-Dichlorobenzene | " |
| 1,3-Dichlorobenzene | " |
| 1,4-Dichlorobenzene | " |
| 3,3-Dichlorobenzidine | " |
| Diethyl Phthalate | " |
| Dimethyl Phthalate | " |
| Di-N-Butyl Phthalate | " |
| 2,4-Dinitrotoluene | " |
| 2-6-Dinitrotoluene | " |
| 1,2-Dipenylhydrazine (as Azobenzene) | " |
| Di-N-Octyl Phthalate | " |
| Fluoranthene | " |
| Fluorene | " |
| Hexachlorobenzene | " |
| Hexachlorobutadiene | " |
| Hexachlorocyclopentadiene | " |
| Hexachloroethane | " |
| Indeno (1,2,3-cd) Pyrene | " |
| Isophorone | " |
| Naphthalene | " |
| Nitrobenzene | " |
| N-Nitrosodimethylamine | " |
| N-Nitrosodi-N-Propylamine | " |
| N-Nitrosodiphenylamine | " |
| Phenanthrene | " |
| Pyrene | " |
| 1,2,4-Trichlorobenzene | " |

| Acid Extractibles | Method |
|---|---|
| 2-Chlorophenol | 625 |
| 2,4-Dichlorophenol | " |
| 2,4-Dimethylphenol | " |
| 4,6-Dinitro-O-Cresol | " |
| 2,4-Dinitrophenol | " |
| 2-Nitrophenol | " |
| 4-Nitrophenol | " |
| P-Chloro-M-Cresol | " |
| Pentachlorophenol | " |
| Phenol | " |
| 2, 4, 6 - Trichlorophenol | " |

| Volatile Organics | Method |
|---|---|
| Benzene | 624 |
| Bromoform | " |
| Carbon Tetrachloride | " |
| Chlorobenzene | " |
| Chlorodibromomethane | " |
| Chloroethane | " |
| 2-Chloroethyl Vinyl Ether | " |
| Chloroform | " |
| Dichlorobromomethane | " |
| 1,1-Dichloroethane | " |
| 1,2-Dichloroethane | " |
| 1,1-Dichloroethylene | " |
| 1,2-Dichloropropane | " |
| 1,3-Dichloropropylene | " |
| Ethylbenzene | " |
| Methyl Bromide | " |
| Methyl Chloride | " |
| Methylene Chloride | " |
| 1,1,2,2-Tetrachloroethane | " |
| Tetrachloroethylene | " |
| Toluene | " |
| 1,2-Trans-Dichloroethylene | " |
| 1,1,1-Trichloroethane | " |
| 1,1,2-Trichloroethane | " |
| Trichloroethylene | " |
| Vinyl Chloride | " |

# California Regional Water Quality Control Board
## Santa Ana Region

:ry Tamminen
*Secretary for Environmental Protection*

Internet Address: http://waterboards.ca.gov/santaana
3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 - FAX (951) 781-6288

Arnold Schwarzenegger
*Governor*


October 26, 2004

Mr. David A. McPhee
452 MSG/CE
610 Meyer Drive, Bldg. 2403
March ARB, CA 92518-2166

**TRANSMITTAL OF WASTE DISCHARGE REQUIREMENTS FOR UNITED STATES AIR FORCE, MARCH AIR RESERVE BASE, ORDER NO. R8-2004-0033**

Dear Mr. McPhee:

Enclosed is a certified copy of Order No. R8-2004-0033 adopted by the Board at its meeting on September 17, 2004. This Order renews requirements for the discharge of storm water to surface waters from March Air Reserve Base.

Please note that recent Water Code changes require the Board to assess mandatory minimum penalties for certain effluent limit violations and late submittal of reports.

You may also view and/or download a copy of the adopted Order from our website at http://www.waterboards.ca.gov/santaana.

Should you have any questions regarding this matter, please contact Ms. Milasol Gaslan at (951) 782-4419 or Mr. Michael Roth at (951) 320-2027.

Sincerely,

Gerard J. Thibeault
Executive Officer

Enclosure: Order No. R8-2004-0033

Cc w/o enclosure: State Water Resources Control Board, Division of Water Quality – James Maughan
U.S. Environmental Protection Agency, Permits Issuance Section - (W-5-1), Terry Oda