STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 W. 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
for
TELAIR INTERNATIONAL, INC.
(THE TALLEY SITE, NEWBURY PARK)

NPDES Permit No.: CA0059609
Public Notice No.: 03-005

FACILITY ADDRESS	FACILITY MAILING ADDRESS
The Tally Site, Newbury Park	Telair International, Inc.
3303 Old Conejo Road	1950 Williams Drive
Newbury Park, CA 91320	Oxnard, CA 93030
	Contact: Susan Salinas
	Telephone: (805) 278-4224

I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

A. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to:

Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Board, written comments should be received at the Regional Board offices by 5:00 p.m. on June 13, 2003.

B. Public Hearing

The Regional Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: July 10, 2003
Time: 9:00 a.m.
Location: Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA

Interested persons are invited to attend. At the public hearing, the Regional Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is www.swrcb.ca.gov/rqcb4 where you can access the current agenda for changes in dates and locations.

C. Waste Discharge Requirements Appeals

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Board's action to the following address:

State Water Resources Control Board, Office of Chief Counsel
ATTN: Elizabeth Jennings, Senior Staff Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

D. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California 90013, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Board, reference this facility, and provide a name, address, and phone number.

II. Introduction

Telair International, Inc., (hereinafter Telair or Discharger) formerly named as Telair Control Systems discharges wastewater to a Caltrans storm drain which then conveys wastewater to an unnamed intermittent stream, tributary to the South Branch of Arroyo Conejo, tributary to Conejo Creek, Calleguas Creek, and Mugu Lagoon, a water of the United States. Wastes discharged from Telair are regulated by WDRs and NPDES permit contained in Board Order No. 97-032 (NPDES Permit No. CA0059606). Order No. 97-032 expired on February 10, 2002.

Telair has filed a report of waste discharge and has applied for renewal of its WDRs and NPDES permit on August 27, 2001. The tentative Order is the reissuance of the WDRs and NPDES permit for discharges from Telair. A site visit was conducted on November 19, 2002, to observe operations and collect additional data to develop permit limits and conditions.

III. Description of Facility and Waste Discharge

Telair International, Inc., is the owner and operator of a vacant 13.55-acre site located at 3303 Old Conejo Road in Newbury Park, California. The site was formerly the location of the Talley Corporation (Talley), which operated an aircraft components manufacturing facility during the 1950s to 1989. Manufacturing processes at the facility included machining of parts, degreasing, heat-treating, and plating and casting. Historically, the facility disposed of its wastewater by evaporation in two onsite surface impoundments that reportedly leaked wastewater to the underlying soil and groundwater.

In late 1988, the U.S. Environmental Protection Agency (USEPA), the California Department of Health Services, Toxic Substances Control Division (now California Department of Toxic Substances Control) entered into an Administrative Order on Consent with Talley (former owner) and Telair (current owner). As an interim measure, a groundwater treatment system was installed at the site in 1989 to initiate groundwater cleanup. In 1989, Talley's operations were shut down and the facility was removed for site remediation.

The ROWD describes the nature of business as a vacant property that is undergoing Resource conservation and Recovery Act (RCRA) post-closure care. The operations at the site are limited to groundwater and vapor extraction, treatment, and discharge. The treatment system includes chemical precipitation and microfiltration for the removal of metals. Subsequently, air stripping is used for the removal of volatile organic compounds (VOCs) present in the groundwater. Groundwater is treated with chemicals to facilitate the precipitation of chromium out of the water; then passed through a series of filters to remove metal constituents. The treated water then passes through an air stripper prior to discharge.

Telair treats the contaminated groundwater and proposes to discharge up to 115,000 gallons per day (gpd) of treated groundwater. The treated groundwater is discharged to a Caltrans storm drain which then conveys the wastewater to an unnamed intermittent stream, tributary to the South Branch of Arroyo Conejo, through Discharge Serial No. 001 (Latitude 34°11'30" North, Longitude

118°56'45" West). The South Branch of Arroyo Conejo is tributary to Conejo Creek, Calleguas Creek, and Mugu Lagoon, a water of the United States, above the estuary, and is part of the Calleguas-Conejo Creek Watershed Management Area.

The Regional Board and the USEPA have classified the Telair facility as a minor discharge.

Effluent data presented in the permit renewal application is summarized in the following table:

Constituent (units)	Reported Long Term Average Value
Biochemical oxygen demand (BOD) (mg/L)	< 5
Chemical oxygen demand (COD) (mg/L)	2,360[1]
Total organic carbon (mg/L)	75.4[1]
Total suspended solids (mg/L)	788
Ammonia (as N) (mg/L)	8.99
Flow (gpd)	115,000[1]
Temperature (winter and summer) (deg. C)	15 – 25
pH (standard units)	6.0 – 9.0
Total residual chlorine (mg/L)	137[1]
Nitrate-Nitrite (as N) (mg/L)	8.99
Nitrogen (total organic) mg/L	< 0.02
Oil and grease (mg/L)	< 5
Sulfate (mg/L)	75.25
Barium (mg/L)	0.02
Boron (mg/L)	0.14
Total chromium (µg/L)	8.33
Zinc (µg/L)	0.5
1,1-Dichloroethane (µg/L)	< 5
1,2-Dichloroethane (µg/L)	< 5
1,1-Dichloroethylene (µg/L)	< 5
Tetrachloroethylene (µg/L)	< 5
1,2-Trans-Dichloroethylene (µg/L)	< 5
1,1,1-Trichloroethane (µg/L)	< 5
Trichloroethylene (µg/L)	< 5

[1] Reported as a maximum daily value.

[2] On April 22, 2003, the Discharger verified via e-mail that this data correlates to Chloride level and was inadvertently written as Residual Chlorine in the renewal application.

All other toxic pollutants were reported as "believed absent".

The effluent monitoring data show that the maximum concentration for 1,1,1-trichloroethane exceeded the existing daily maximum permit limitation of 5.0 µg/L during the second quarter analysis of 1997. Subsequent monitoring data showed non-detect. In addition, on July 12, 2002, the Second Quarter Monitoring report indicated tetrachloroethylene was detected at 5.9 µg/L, but an addendum to that report was submitted on July 19, 2002 stating that tetrachloroethylene was not detected above 0.5 µg/L.

IV. Applicable Plans, Policies, and Regulations

The requirements contained in the proposed Order are based on the requirements and authorities contained in the following:

1. The federal Clean Water Act (CWA). The federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be done in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.

2. Title 40, Code of Regulations (40 CFR) – Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limits for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limits for certain pollutants discharged.

3. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. The immediate receiving body for the permitted discharge covered by this permit is a Caltrans storm drain which conveys wastewater to an unnamed intermittent stream, tributary to the South Branch of Arroyo Conejo. The tributary rule states that those waters not specifically listed (generally smaller tributaries) are designated with the same beneficial uses as the streams, lakes or reservoirs to which they are tributary. Hence the beneficial uses of the Arroyo Conejo were used to determine the applicable and appropriate water quality standards for the receiving water. The Basin Plan contains beneficial uses and water quality objectives for the Arroyo Conejo. The beneficial uses listed in the Basin Plan for the Arroyo Conejo are:

   Arroyo Conejo – Hydro Unit No. 403.64

   Existing: wildlife habitat, and preservation or rare, threatened or endangered species.

   Intermittent: groundwater recharge, freshwater replenishment, contact and non-contact water recreation, and warm freshwater habitat.

   Potential: municipal and domestic water supply.

4. The State Water Resources Control Board (State Board) adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

5. On May 18, 2000, the U.S. Environmental Protection Agency (USEPA) promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR § 131.38]. In the CTR, USEPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens. The CTR also provides a schedule of compliance not to exceed 5 years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with the CTR criteria.

6. On March 2, 2000, State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP*).* The SIP was effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through National Toxics Rule (NTR) and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring WQBELs and to calculate the effluent limitations. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of Arroyo Conejo.

7. 40 CFR section 122.44(d)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that water quality-based effluent limits (WQBELs) may be set based on USEPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

8. State and Federal antibacksliding and antidegradation policies require that Regional Board actions to protect the water quality of a water body and to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in section 402(o) of the CWA and in the Title 40 of the Code of Federal Regulations (40 CFR), section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.

9. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of the Arroyo Conejo.

10. Existing waste discharge requirements contained in Board Order No. 97-032, adopted by the Regional Board on April 7, 1997. In some cases, permit conditions (effluent limits and other

special conditions) established in the existing waste discharge requirements have been carried over to this permit.

V. Regulatory Basis for Effluent Limitations

The CWA requires point source dischargers to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet water quality-based effluent limitations (WQBELs) that are developed to protect applicable designated uses of the receiving water.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- Best practicable treatment control technology (BPT) is based on the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.

- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.

- Best conventional pollutant control technology (BCT) is a standard for the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

- New source performance standards (NSPS) that represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern.

If a reasonable potential exists for pollutants in a discharge to exceed water quality standards, WQBELs are also required under 40 CFR 122.44(d)(1)(i). WQBELs are established after

determining that technology-based limitations are not stringent enough to ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's antidegradation policy. For discharges to inland surface waters, enclosed bays, and estuaries, the SIP establishes specific implementation procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by USEPA through the CTR and NTR, as well as the Basin Plan.

There are several other specific factors affecting the development of limitations and requirements in the proposed Order. These are discussed as follows:

1. **Pollutants of Concern**

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations and SIP require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective. The SIP includes provisions for priority pollutant criteria promulgated by USEPA in the CTR and NTR, and for those priority pollutants outlined in the Basin Plan.

Effluent limitations for Discharge Serial No. 001 in the current permit were established for turbidity, settleable solids, suspended solids, oil and grease, and BOD_5, because they are parameters typically used to characterize wastewater; thus effluent limitations for these parameters have been established in this permit. Sulfate, chloride, total dissolved solids, boron, and nitrogen (as nitrate + nitrite) are commonly present in groundwater; thus effluent limitations for these parameters have been established in this permit.

The existing permit established effluent limitations for a number of pollutants believed to be present in the discharge of treated groundwater. The surface impoundments that previously existed at the site held wastewater from industrial manufacturing processes including machining, degreasing, heat treating, plating, and casting, and may have contained VOCs and metals. It is presumed that the existing regulated pollutants are still considered pollutants of concern in this permit due to the nature of current groundwater remediation activities.

The ROWD contained a maximum daily concentration for chemical oxygen demand (COD) of 2,360 mg/L, and a long-term average concentration for biochemical oxygen demand (BOD) of < 5 mg/L from Discharge Serial No. 001. Due to the characteristics of this waste stream and the elevated concentrations reported in the application, it is appropriate to consider COD as a pollutant of concern for this discharge. This Order prescribed monthly monitoring for COD to determine its presence in the effluent and impact on receiving waters.

2. **Technology-Based Effluent Limits**

This permit will require the Discharger to continue to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP). The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters. Due to the fact that storm water discharges may occur at the Telair facility, this permit will require that Telair develop and implement a SWPPP.

There are currently no national effluent limitation guidelines (ELGs) for groundwater treatment systems. It should be noted that the previous permit stated that the current treatment system is considered to be the BAT economically achievable.

3. **Water Quality-Based Effluent Limits**

As specified in 40 CFR § 122.44(d)(1)(i), permits are required to include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria (that are contained in other state plans and policies, or USEPA water quality criteria contained in the CTR and NTR). The specific procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the SIP.

The CTR contains both saltwater and freshwater criteria. According to 40 CFR § 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time; saltwater criteria apply at salinities of 10 ppt and above at locations where this occurs 95 percent or more of the time; and at salinities between 1 and 10 ppt the more stringent of the two apply. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of Arroyo Conejo.

Some water quality criteria are hardness dependent. The Discharger stated the receiving water is a Caltrans storm drain, and is typically dry; thus, salinity measurements are not available for the receiving water. Therefore, a hardness value of 100 mg/L as $CaCO_3$ is assumed for determining applicable hardness-dependent criteria for certain metals.

(a) Reasonable Potential Analysis (RPA)

In accordance with Section 1.3 of the SIP, the Regional Board will conduct a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Board would analyze

effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have a reasonable potential, numeric WQBELs are required. The RPA considers water quality objectives outlined in the CTR, NTR, as well as the Basin Plan. To conduct the RPA, the Regional Board must identify the maximum observed effluent concentration (MEC) for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

1) Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limit is needed.

2) Trigger 2 – If MEC<C and backgroundwater quality (B) > C, a limit is needed.

3) Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Board to conduct the RPA. Upon review of the data, and if the Regional Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The RPA was performed for the priority pollutants for which effluent data were available. The Regional Board issued a letter on August 3, 2001 that required Telair to monitor for priority pollutants regulated in the CTR. Monitoring data for these pollutants are available for the period from November 2001 through July 2002. These data were used in the RPA and are summarized in Attachment C.

Based on the RPA, there was reasonable potential to exceed water quality standards for cadmium, chromium (VI), copper, mercury, and tetrachloroethylene. Refer to Attachment C for a summary of the RPA and associated effluent limitation calculations.

(b) Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 1.4 of the SIP. These procedures include:

1) If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

2) Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

3) Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

(c) Impaired Water Bodies in 303 (d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The USEPA has approved the State's 303(d) list of impaired water bodies. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 1998 303(d) list and have been scheduled for TMDL development.

Calleguas Creek and its major tributaries, Revolon Slough, Conejo Creek, Arroyo Conejo, Arroyo Santa Rosa, and Arroyo Simi drain an area of 343 square miles in southern Ventura County and a small portion of Western Los Angeles County. The 1998 State Board's California 303(d) List classifies Conejo Creek, Calleguas Creek, Calleguas Creek Estuary, and Mugu Lagoon as impaired. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include algae, ammonia, cadmium, Chem A [refers to the sum of aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene], chlordane, chromium, copper, dacthal, dissolved oxygen (organic enrichment), DDT, endosulfan, mercury, nickel, nitrogen, PCBs, sediment toxicity, silver, sulfate, total dissolved solids, toxaphene, toxicity, and zinc.

(d) Whole Effluent Toxicity

Whole Effluent Toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other

detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The existing permit contains acute toxicity limitations and monitoring requirements.

In accordance with the Basin Plan, acute toxicity limitations dictate that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements and existing permit limitations, this Order includes acute toxicity limitations.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters.

The discharges at the Telair facility occur continuously and, due to the types of pollutants present in the groundwater treated at the site, could contribute to long-term toxic effects. However, no chronic toxicity data is available for the discharge. Therefore, the Discharger will be required to conduct chronic toxicity testing in order to determine reasonable potential and establish WQBELs as necessary. In addition, this Order includes a chronic testing trigger hereby defined as an exceedance of 1.0 toxic units chronic (TU_c) in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed 1.0 TU_c in a critical life stage test.) If the chronic toxicity of the effluent exceeds 1.0 TU_c, the Discharger will be required to immediately implement accelerated chronic toxicity testing according to Monitoring and Reporting Program, Item IV.D.1. If the results of two of the six accelerated tests exceed 1.0 TU_c, the Discharger shall initiate a toxicity identification evaluation (TIE).

4. <u>Specific Rationale for Each Numerical Effluent Limitation</u>

The Regional Board has determined that reasonable potential exists for all pollutants that are regulated under the current permit; therefore effluent limitations have been established for these pollutants. Furthermore, the requirements in the proposed Order for turbidity, settleable solids, suspended solids, oil and grease, BOD_5, total dissolved solids, sulfate, chloride, boron, nitrate + nitrite (as N), residual chlorine, and sulfides (shown in the table below) are based on limits specified in Telair's existing permit. The effluent limitation for pH is based on the Basin Plan.

In 1990, the Regional Board adopted Resolution No. 90-004 (Drought Policy) which had a term of 3 years and provided interim relief to dischargers who experienced difficulty meeting chloride objectives because of a state-wide drought. The policy adjusted effluent limits to the lesser of 1) 250 mg/l or 2) the chloride concentration in the water supply plus 85 mg/l. In 1995, the Regional Board extended the interim limits for 3 years and directed

staff to develop a long-term solution to deal with the impact of changing water supply, especially during droughts. In 1997, the Regional Board adopted Resolution No. 97-002 (Chloride Policy) which set the chloride objective at 190 mg/L except in certain watersheds including the Calleguas Creek watershed, where, due to the great concern for protection of agriculture, staff were directed to determine the chloride concentrations sufficient to protect agricultural beneficial uses. Thus, this permit set a chloride limit of 150 mg/L based on the Basin Plan's water quality objective. Effluent monitoring data provided by the Discharger shows that chloride concentrations for the period from January 1997 to July 2002 ranged from 103 mg/L to 148 mg/L.

In addition, to protect the beneficial uses of the receiving water, this permit prescribed an effluent limitation for total dissolved solids (TDS) of 850 mg/L based on the Basin Plan.

Section 402(o) of the Clean Water Act and 40 CFR 122.44(l) require that effluent limitations standards or conditions in re-issued permits are at least as stringent as in the existing permit. An RPA was conducted on the monitoring data from January 1997 to July 2002 were used to conduct RPAs for certain toxic pollutants for which effluent data were available. Based on the RPA results, the following pollutants have a reasonable potential and are subject to effluent limitations: cadmium, chromium (VI), copper, mercury, and tetrachloroethylene. For those that show reasonable potential and for which existing effluent limitations exist, a comparison between existing permit limitations and CTR-based WQBELs was made, and the most stringent limitation is included in the Order. For tetrachloroethylene, the existing permit limitation is more stringent; therefore, it will be carried over to this permit. For cadmium, chromium, and mercury, the CTR-based WQBELs are more stringent; therefore, they are established in this permit. In addition, CTR-based WQBELs are established for copper because it shows reasonable potential to exceed state water quality standards. Because of the Discharger's nature of operation, certain toxic pollutants (i.e., VOCs, metals, total petroleum hydrocarbons, and phenolic compounds) that have effluent limitations in the previous permit are subject to effluent limitations.

Constituents	Units	Average Monthly Discharge Limitations		Maximum Daily Discharge Limitations		Rationale
		Concentration	Mass[1] (lbs/day)	Concentration	Mass[1] (lbs/day)	
Turbidity	NTU	50	--	75	--	E
Settleable solids	ml/L	0.1	--	0.2	--	E
Total suspended solids	mg/L	50	48	75	72	E
Oil and Grease	mg/L	10	9.6	15	14	E
BOD_5	mg/L	20	19.2	30	28	E
Total dissolved solids	mg/L	---	---	850	815	BP
Sulfate	mg/L	---	---	250	240	

Constituents	Units	Average Monthly Discharge Limitations		Maximum Daily Discharge Limitations		Rationale
		Concentration	Mass[1] (lbs/day)	Concentration	Mass[1] (lbs/day)	
Chloride	mg/L			150	144	BP
Boron	mg/L	---	---	1.0	0.96	E
Nitrate + Nitrite (as Nitrogen)	mg/L	---	---	10	9.6	E
Residual Chlorine	mg/L	---	---	0.1	---	E
Sulfides	mg/L	---	---	1	---	E
Phenols	mg/L	---	---	1	---	E
Phenolic Compounds (chlorinated)	µg/L	---	---	1	---	E
Benzene	? g/L	---	---	1	---	E
Toluene	? g/L	---	---	10	---	E
Xylene	? g/L	---	---	10	---	E
Ethylbenzene	? g/L	---	---	10	---	E
Dichlorobromomethane	? g/L	---	---	100	---	E
Carbon tetrachloride	? g/L	---	---	0.5	---	E
1,1-Dichloroethane	? g/L	---	---	5	---	E
1,2-Dichloroethane	? g/L	---	---	0.5	---	E
1,1,1-Trichloroethane	? g/L	---	---	5	---	E
1,1-Dichloroethylene	? g/L	---	---	6	---	E
Trans 1,2-Dichloroethylene	? g/L	---	---	10	---	E
Trichloroethylene	? g/L	---	---	5	---	E
Tetrachloroethylene	? g/L	---	---	5	---	E
Vinyl chloride	? g/L	---	---	0.5	---	E
Arsenic (µg/L) [2]	? g/L	---	---	50	---	E
Cadmium (µg/L)[,23]	? g/L	0.22	---	0.445	---	CTR
Chromium VI (µg/L) [2,3]	? g/L	8.12	---	16.29	---	CTR
Copper (µg/L) [2,3]	? g/L	7.98	---	14	---	CTR
Lead (µg/L) [2]	? g/L	---	---	50	---	E
Mercury (µg/L)[2,3]	? g/L	0.051	---	0.102	---	CTR
Selenium (µg/L) [2]	? g/L		---	10	---	E
Silver (µg/L) [2]	? g/L		---	50	---	E

[1] The mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 115,000 gpd.

The equation used to calculate the mass is:
m = 8.34 * C * Q where:
m = mass limit for a pollutant in lbs/day
C = concentration limit for a pollutant, mg/L
Q = maximum discharge flow rate, mgd

[2] Discharge limitations for these metals are expressed as total recoverable.
[3]The interim limits in Section 5 below are applicable from the date of adoption of the Order through July 10, 2005.

E = Existing permit
BP = Basin Plan
CTR = California Toxic Rule

5. **Interim Limits and Compliance Schedule**

The Telair may not be able to achieve immediate compliance with the WQBELs for cadmium, chromium (VI), copper, and mercury. Data submitted in self-monitoring reports indicate that these constituents have been detected at concentrations greater than the new limit proposed in this Order. The Discharger may not be able to achieve immediate compliance with an effluent limitation based on CTR criterion for these constituents.

40 CFR 131.38(e) provides conditions under which interim effluent limits and compliance schedules may be issued. The CTR and SIP allow inclusion of an interim limit with a specific compliance schedule included in a NPDES permit for priority pollutants if the limit for the priority pollutant is CTR-based. Numeric interim limitations for the pollutants shall be based on current treatment facility performance. Interim limits for cadmium, chromium (VI), copper, and mercury have been included in this Order. During the compliance period, the current treatment facility performance or the existing effluent limitations, whichever is more stringent, is imposed as the interim effluent limitation.

The SIP requires that the Regional Board establish other interim requirements, such as requiring the discharger to develop a pollutant minimization plan and/or source control measures, and participate in the activities necessary to develop final effluent limitations. When interim requirements have been completed, the Regional Board shall calculate final WQBELs for that pollutant based on the collected data, reopen the permit, and include the final effluent limitations in the permit provisions. Once final limitations become effective, the interim limitations will no longer apply. These interim limitations shall be effective until July 10, 2005, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

Within six months from the effective date of the Order, the Discharger must prepare and submit a compliance plan that describes the steps that will be taken to ensure compliance with the final effluent limitations. Once final limitations become effective, the interim limitations will no longer apply. The Discharger is also required to submit to the Regional Board quarterly progress reports describing the progress of studies and or actions undertaken to reduce these compounds in the effluent, and to achieve compliance with the final limitations in this Order by the deadline specified in provision I.B.5. of the Order. The first progress report shall be received by the Regional Board by November 15, 2003.

From the effective date of this Order until July 10, 2005 the discharge of effluent from Discharge Serial No. 001 in excess of the following interim limitations is prohibited:

Constituent (units)	Discharge Limitations		Rationale[1]
	Daily Maximum Concentration	Monthly Average Concentration	
Cadmium (µg/L) [2]	10	--	E, MEC
Chromium VI (µg/L) [2]	---	14	CTR/MEC
Copper (µg/L) [2]	20	--	MEC
Mercury (µg/L) [2]	0.24	--	MEC

[1] MEC= Maximum Effluent Concentration, E= Existing permit (Order No. 97-032) Effluent Limitation
[2] Discharge limitations for these metals are expressed as total recoverable. The effluent limits in this table are effective from the date of adoption of this Order through July 10, 2005.

6. **Monitoring Requirements**

(a) Effluent Monitoring

To demonstrate compliance with effluent limitations established in the permit, this Order carries over the existing monitoring requirements for most parameters. Monitoring data during the previous permit term suggest that the Discharger has the potential to exceed the established effluent limitations for cadmium, chromium, copper, mercury, and tetrachloroethylene. Therefore, the Board is requiring monthly monitoring for these constituents, to ensure compliance with established effluent limitations. This Order establishes quarterly monitoring requirements for phenolic compounds, arsenic, mercury, selenium, and silver to demonstrate compliance with effluent limitations. In addition, this Order requires monthly monitoring for chemical oxygen demand (COD), methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA) to determine presence in the effluent.

Monitoring data for the period from January 1997 to July 2002 show concentrations below detectable levels for all samples of phenols, dichlorobromomethane, carbon tetrachloride, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethylene, trans 1,2-dichloroethylene, and vinyl chloride. Accordingly, the monitoring frequency for most parameters has been reduced from monthly to annually; for other priority pollutants quarterly monitoring requirements has been carried over from the existing permit. Whereas the existing permit allowed for the discontinuation of monitoring for benzene, toluene, xylene, and ethylbenzene if two consecutive quarterly analyses showed concentrations below detectable levels, this Order establishes annual monitoring for these constituents to determine compliance with effluent limitations. In addition, monitoring data for the period from January 1997 to July 2002 show concentrations below detectable levels for these parameters.

(b) Effluent Monitoring for Reasonable Potential Determination

The Regional Board issued a letter on August 3, 2001 that required Telair to monitor for priority pollutants regulated in the CTR, and submit the data by May 22, 2003. As discussed previously, the Discharger has submitted data for the period from November 2001 to July 2002, and these data were used to conduct the RPA. Upon completion of the required monitoring, the Regional Board will use the additional gathered data to revise the RPA and determine if a WQBEL is required, and may reopen the permit to incorporate additional effluent limitations and requirements if necessary.

(c) Receiving Water Monitoring

Teleflex is required to perform general observations of the receiving water when discharges occur and report the observations in the quarterly monitoring report. The Regional Board in assessing potential impacts of future discharges will use data from these observations. If no discharge occurred during the observation period, this shall be reported. Observations shall be descriptive where applicable, such that colors, approximate amounts, or types of materials are apparent. The following observations are required:

- Tidal stage, if any, time, and date of monitoring;
- Weather conditions;
- Color of water;
- Appearance of oil films or grease, or floatable materials;
- Extent of visible turbidity or color patches;
- Direction of tidal flow, if any;
- Description of odor, if any, of the receiving water; and
- Presence and activity of California Least Tern and California Brown Pelican.