

1 STATE OF CALIFORNIA
2 ENVIRONMENTAL PROTECTION AGENCY
3 DEPARTMENT OF TOXIC SUBSTANCES CONTROL

4 In the matter of:

Docket Number: PAT-FY08/09-02

5 The Boeing Company
6 Rocketdyne Propulsion and Power
7 Santa Susana Field Laboratory,
8 Areas I and III
9 Simi Hills, California 93065
10 EPA ID. NO. CAD 093 365 435

RE: ORDER PARTIALLY GRANTING
PETITION FOR REVIEW AND
DENIAL OF REVIEW

and

11 National Aeronautics & Space
12 Administration (NASA) / The
13 Boeing Company
14 Santa Susana Field Laboratory,
15 Area II
16 Simi Hills, California 93065
17 EPA ID. NO. CA1 800 090 010

California Code of Regulations,
Title 22, Section 66271.18

Effective Date: November 4, 2008

18 **I. INTRODUCTION**

19 On November 19, 2004, the Department of Toxic Substances Control's
20 Southern California Permitting and Corrective Action Branch (SCPCAB) issued
21 two Class 2 Permit Modifications for two Post-Closure Permits (PC-94/95-3-02,
22 MOD SC3-111904-A and PC 94/95-3-03, MOD SC3-111904-B). These two post
23 closure permits govern nine closed surface impoundments at the Santa Susana
24 Field Laboratory facility (SSFL or Facility) under the Resource Conservation and
25 Recovery Act (RCRA) requirements. The SSFL is located in Simi Hills, Ventura
26 County, California. On or before December 22, 2004, DTSC received two
27 petitions for review (appeals) of SCPCAB's permit modification decisions. One
28 petition was filed jointly by The Boeing Company Rocketdyne Propulsion and
Power and National Aeronautics & Space Administration (NASA) (hereafter
Petitioner Boeing), and one from Philip Chandler (hereafter Petitioner Chandler).

1 In the mid-1980s, the respective owners and/or operators discontinued the
2 use of the nine RCRA surface impoundments in Areas I, II, and III. There are
3 four RCRA regulated surface impoundments in Area II and five in Areas I and III.
4 The RCRA surface impoundments had been used for containment purposes for
5 activities related to the testing of rocket engines and engine components. The
6 impoundments received rinse water that may have contained traces of fuels,
7 oxidizers, or solvents. The impoundments have been undergoing the formal
8 RCRA closure process since 1985. The respective owner and/or operators are
9 required to conduct post-closure care because the surface impoundments could
10 not be clean-closed due to groundwater contamination.

11
12 **B. PERMIT DECISION**

13 In 1995, SCPCAB issued two Hazardous Waste Facility Post-Closure
14 Permits for the facility. The permit (PC-94/95-3-02) for Areas I and III was issued
15 to Rockwell International Corporation, Rocketdyne Division (Rockwell-
16 Rocketdyne). The permit (PC-94/95-3-03) for Area II was issued to NASA and
17 Rockwell-Rocketdyne. After issuance of the permits, Rockwell-Rocketdyne was
18 purchased by The Boeing Company. The Boeing Company, Rocketdyne
19 Propulsion and Power is the owner/operator for Areas I and III. The NASA and
20 the Boeing-Rocketdyne are the owners/operators for Area II respectively.

21 On February 27, 2003, the SCPCAB issued notification to The Boeing
22 Company (the operator of both permits) that the groundwater monitoring
23 programs established for the two 1995 post-closure permits at the SSFL do not
24 satisfy the requirements of California Code of Regulations, title 22, division 4.5,
25 chapter 14, article 6. On May 28, 2003 The Boeing Company submitted two
26 permit modification requests to the DTSC for modification of the two 1995
27 hazardous waste facility permits (Permit Numbers PC-94/95-3-02 and PC-94/95-
28 3-03). The two proposed permit modifications were submitted to:

- 1 1. update the groundwater monitoring program;
- 2 2. update the Water Quality Sampling and Analysis Plan;
- 3 3. update language in the permit to add clarification.

4 On June 3, 2003, the SCPCAB issued a public notice announcing the start
5 of a 60-day public comment period for proposed modifications to the permits.

6 The public comment period ended on August 4, 2003. The SCPCAB received a
7 total of eleven comments; eight were from Christina Walsh (West Hills Property
8 Association, Inc.), two were from Linda Parks (Board of Supervisors, County of
9 Ventura District 2) and Liz Crawford, and one was from Madeline Felkins.

10 On November 19, 2004, the SCPCAB issued its final Hazardous Waste
11 Facility Post-Closure Permit decisions on the two permit modification requests for
12 the four RCRA surface impoundments in Area II and five in Areas I and III, along
13 with a Response to Comments Document. A Notice of Exemption was filed to
14 comply with the requirements of California Environmental Quality Act (CEQA)
15 along with the final permit decision on November 19, 2004. The SCPCAB's final
16 permit decision included the following:

- 17 1. Incorporating language to make sections of the permit consistent
18 with regulatory language.
 - 19 2. The addition of and/or removal of wells in the groundwater
20 monitoring program.
 - 21 3. The construction of three new monitoring wells.
 - 22 4. Removing the permit condition to videotape selected wells.
 - 23 5. Reinstating many of the monitoring wells back into various
24 monitoring programs.
 - 25 6. Adding existing wells (not previously part of the monitoring
26 program) into the groundwater monitoring program.
- 27
28

1 **C. PERMIT APPEAL PROCESS**

2 Pursuant to California Code of Regulations, title 22, section 66271.18(a),
3 the period for filing a petition for review (appeal) of this final Permit decision
4 ended on December 22, 2004. Appeals were submitted by Petitioner Boeing and
5 Petitioner Chandler on or before that date. In accordance with California Code of
6 Regulations, title 22, sections 66271.14(b)(2), the two Class 2 permit
7 modifications have been stayed until the Department completes its review of the
8 appeals to determine which, if any, of the issues raised in the appeal meet the
9 criteria for review pursuant to California Code of Regulations, title 22 section
10 66271.18.

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12 **IV. STANDARD OF REVIEW**

13 California Code of Regulations, title 22, section 66271.18(a), provides that
14 those persons who filed comments, or participated in the public hearing, on a
15 draft permit decision (during the public comment period for the draft permit
16 decision) may petition the Department to review any condition of the final permit
17 decision to the extent that the issues raised in the petition for review were also
18 raised during the public comment period for the draft permit decision, including
19 the public hearing. In addition, any person who did not file comments or
20 participate in the public hearing on the draft permit may petition the Department
21 for review of the final permit decision, but only with respect to those conditions in
22 the final permit decision that differ from the draft permit decision.

23
24 Section 66271.18(a) also provides, in pertinent part, that:

25 "The petition shall include a statement of the reasons
26 supporting that review, including a demonstration that any issues
27 being raised were raised during the public comment period
28 (including any public hearing) to the extent required by these
regulations and when appropriate, a showing that the condition in
question is based on:

- 1 (1) a finding of fact or conclusion of law which is clearly
- 2 erroneous, or
- 3
- 4 (2) an exercise of discretion or an important policy
- 5 consideration which the Department should, in its
- 6 discretion, review.”

7 California Code of Regulations, title 22, section 66271.12, specifies the
8 extent to which issues are required to be raised during the public comment
9 period for a draft permit decision. Specifically, this section states that “All
10 persons, including applicants, who believe any condition of a draft permit is
11 inappropriate or that the Department’s tentative decision to deny an application
12 or prepare a draft permit is inappropriate, must raise all reasonably ascertainable
13 issues and submit all reasonably available arguments and factual grounds
14 supporting their position.”

15 **V. DISCUSSION AND FINDINGS**

16 The Department finds that Petitioner Boeing and Petitioner Chandler have
17 standing to petition for review of any issues that pertain to changes from the draft
18 to the final permit decision. The Department has reviewed the two appeals and
19 hereby responds to the comments presented by Petitioners.

20

21 **Boeing Comments II-A through II-G, and III-A through III-D**

22 The Department has determined that each of the following 11 Boeing
23 comments merit a similar response. The Department’s response follows the
24 recitation of Boeing’s 11 comments.

25

26 **Boeing Comment II-A**

27 **The Permit Imposes An Excessive Constituents of Concern**
28 **Analysis That Does Not Adequately Consider Historical Data**

1 The permit modification significantly increases the monitoring
2 frequency required for Constituents of Concern over that proposed by
3 Boeing. *Post-Closure Permits, Table 4 and Table 7*. With regard to
4 the number of constituents, the modification requires Boeing and
5 NASA to analyze for the complete list of Constituents of Concern
6 (COCs) as the minimum analytical suite for analysis. Given the history
7 of the site and the data developed to date, there appears to be no
8 justification for imposing this requirement. The comprehensive data
9 that have been provided to DTSC document the historical record of
10 sampling that has been conducted pursuant to the Post-Closure
11 Permits, the site-wide monitoring program, and other programs at the
12 facility. These data demonstrate that certain COCs have not been
13 detected in groundwater in the vicinity of individual impoundments.
14 The data should offer a baseline for determining an appropriate
15 analytical suite for the monitoring program. DTSC's inclusion of a
16 blanket requirement for all COCs on quarterly frequency does not
17 consider the comprehensive, historical water quality analyses.

18 Based on the available data, Boeing believes that the complete
19 Constituents of Concern analyses should be required only once
20 initially to determine an appropriate analytical suite, "Monitoring
21 Parameters". Then, in order to ensure that the analytical suite
22 continues to be appropriate, the complete Constituents of Concern
23 analyses should be repeated on a five-year frequency.

24 Boeing Comment II-B

25 **Requiring Quarterly Monitoring Disregards Historical Sampling 26 and Water Quality Trends**

27 The specified quarterly sampling frequency for all COCs during the
28 first year of monitoring also is inappropriate, as the modification
seemingly assumes that this is a new project. *Post-Closure
Permits, Section H. 2 and Table 7*. As noted above, the
comprehensive data that have been provided document the
historical record of sampling that has been conducted pursuant to
the Post-Closure Permits, the site-wide monitoring program, and
other programs at the facility. These data include thousands of
samples taken at regular intervals from wells over many years.
Boeing proposed semi-annual groundwater sampling because the
need for a quarterly monitoring frequency is not justified by the
observed stability in groundwater quality, as documented by the
comprehensive historical data provided to DTSC (e.g. quarterly and
annual groundwater monitoring reports). DTSC has the authority in
22 CCR 66264.97(e)(12) to allow semi-annual sampling.

1 Boeing Comment II-C

2 **The Monitoring Network Includes Existing Wells Unrelated to**
3 **the Regulated Units**

4 The permit modification includes approximately 58 additional
5 groundwater monitoring wells that have been installed and
6 monitored by Boeing and NASA for site-wide or other groundwater
7 investigations unrelated to the Regulated Units in the Post-Closure
8 Permits groundwater monitoring program. *Post-Closure Permits,*
9 *Table 7.* The Agency has added "Evaluation Monitoring Wells" to
10 the required monitoring for specific regulated units without any
11 hydrogeologic basis for their inclusion. A specific example of this is
12 the inclusion of wells RD-49A, RD-49B and RD-49C as wells in the
13 affected media associated with the ABSP impoundment. These
14 wells are nearly 1000 feet from the impoundment and may have
15 been impacted by inadvertent releases from facilities and
16 operations unrelated to the ABSP impoundment that currently are
17 being monitored through the RCRA Facilities Investigation program.
18 Neither the DTSC Letter of Determination nor other comments on
19 the proposed modification offer a technical or regulatory basis for
20 including these wells.

15 Boeing Comment II-D

16 **The Monitoring Network Inappropriately Includes Wells Owned**
17 **by Parties Other Than NASA or Boeing**

18 The permit modification includes several monitoring wells that are
19 not owned or controlled by NASA or Boeing (e.g., OS-26).
20 "*Hazardous Waste Facility Post Closure Permit Rocketdyne, Santa*
21 *Susana Field Laboratory, Areas I and III" (PC-94/95-3-02). Table 7.*
The permit should include only Boeing or NASA owned wells.

22 Boeing Comment II-E

23 **The Sampling and Analysis Requirements Include**
24 **Constituents Not Associated with the Impoundments or**
25 **Otherwise Inappropriate**

- 26 (1) Perchlorate. Perchlorate was not a chemical identified to
27 have been used at any of the nine closed surface
28 impoundments. Supporting documentation has been
provided previously to the DTSC indicating that perchlorate

1 impacts at SSFL are not associated with the impoundments.
2 *Post-Closure Permit, Table 4.*

- 3 (2) Phthalates. The phthalates are known common laboratory
4 contaminants and were not known to be used at the closed
5 surface impoundments. *Post-Closure Permits, Table 4.*
- 6 (3) Sulfuric Acid. Sulfuric acid per se cannot be determined in
7 water. Sulfate and pH are already being analyzed for. *Post-
8 Closure Permits, Table 4.*
- 9 (4) Napthene/Naphthene. We assume DTSC means to refer to
10 Napthene/Naphthene and not Napthalene. Naphthenes
11 identified in relation to chemical use at the impoundments
12 are a generic group of hydrocarbons characterized by
13 saturated carbon atoms in a ring structure (also called
14 cycloparaffin or cycloalkane). Naphthalene is a poly-
15 aromatic hydrocarbon which can be determined using EPA
16 method 8260B (chemical formula C₁₀H₈). *Post-Closure
17 Permits, Table 4.*
- 18 (5) Hydrazine. Hydrazine, Monomethyl Hydrazine, and UDMH
19 are unstable and have short half-lives in the environment
20 and are no longer utilized at SSFL. Boeing has previously
21 sampled and analyzed groundwater in the vicinity of the
22 impoundments for breakdown or daughter products (e.g.,
23 formaldehyde and n-nitrosodimethylamine). However, the
24 DTSC requirement for hydrazine analysis is premature and
25 inappropriate at this time since their proposed new method
26 requires additional evaluation to determine their accuracy
27 and availability of reliable commercial laboratories to perform
28 the proposed analysis. Furthermore, the Department of
Health Services has not certified analytical methodologies
and the applicability of the test methods proposed by DTSC.
Post-Closure Permits, Table 4.
- (6) Sodium Azide. Sodium Azide per se cannot be determined
in water. Sodium is specified for analysis as a background
general water quality parameter. The Department of Health
Services has not certified analytical methodologies for azide
and the applicability of the azide test methods proposed by
OTSC would require additional evaluation as to their
accuracy and the availability of commercial laboratories to
perform the proposed test methods. *"Hazardous Waste*

1 Facility Post-Closure Permit Rocketdyne, Santa Susana
2 Field Laboratory, Areas I and III" (PC-94/95-3-02), Table 4.

3 Boeing Comment II-F

4 **The Modification Imposes Improper Analytical Methods**

5 There are two instances in which DTSC imposes improper
6 analytical methods:

- 7 (1) 1,3-Dinitrobenzene using 8260B. SW846 does not list
8 1,3-dinitrobenzene as an approved analyte by method
9 8260B. *Post-Closure Permits, Table 4.*
- 10 (2) Hydrazine, MMH, UDMH. California Department of Health
11 Services has not identified certified analytical methods for
12 Hydrazine, Monomethylhydrazine, and Unsymmetrical
13 Dimethylhydrazine (UDMH). Technical methods for
14 analyzing these constituents are under study. *Post-Closure
15 Permits, Table 4.*

14 Boeing Comment II-G

15 **The Modification Citation for Concentration Limits is Incorrect**

16 The reference to 22 CCR 66264.97(3)(11)(B) appears to be more
17 appropriately 22 CCR 66264.97(e)(11)(B). *Post-Closure Permits,
18 Table 4.*

19 Boeing Comments III-A, III-B, and III-C

20 **The Modification Contains Several Factual Errors or
21 Omissions**

22 Comment III-A

23 DTSC has rejected well HAR-24 as a Background Well at APTF.
24 Boeing provided supporting documentation indicating that HAR-24
25 is located hydraulically upgradient of the APTF impoundments. In
26 rejecting HAR-24 as a background well, DTSC provides no
27 supporting documentation indicating that the impacts at HAR-24
28 are the result of releases from the APTF impoundments rather than
other sources. *"Hazardous Waste Facility Post-Closure Permit
Rocketdyne, Santa Susana Field Laboratory, Areas I and III" (PC-
94/95-3-02) Table 2.*

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2 Comment III-B

3 DTSC also rejects well HAR-11 as a Background Well at ABSP. As
4 with HAR-24, Boeing has provided supporting documentation
5 indicating that HAR-11 is located hydraulically upgradient of the
6 ABSP impoundment. Again, DTSC provides no supporting
7 documentation indicating that the impacts at HAR-11 are the result
8 of releases from the ABSP impoundment rather than other sources.
9 *"Hazardous Waste Facility Post-Closure Permit NASA, Santa
10 Susana Field Laboratory, Area II" (PC-94/95-3-03) Table 2.*

11 Comment III-C

12 ES-33 is misidentified as an STL-IV-1 Evaluation Monitoring
13 Program Well. Boeing proposed HAR-33 as an Evaluation
14 Monitoring Well for STL-IV-1. *"Hazardous Waste Facility Post -
15 Closure Permit Rocketdyne, Santa Susana Field Laboratory, Areas
16 I and III" (PC-94/95-3-02) Table 6 and Table 7.*

17 Comment III-D

18 **The Modification Contains Several Factual Errors or
19 Omissions**

20 References to SPA-1 and SPA-2 are transposed. The SPA-1
21 impoundment is located approximately 400 feet west of the SPA-2
22 impoundment. *"Hazardous Waste Facility Post-Closure Permit
23 NASA, Santa Susana Field Laboratory, Area II" (PC-94/95-3-03)
24 Table 1, Table 2, Table 5, Table 6, Table 7 and applicable text
25 associated with the Tables.*

26 **Response to Boeing Comments II-A through II-G, and III-A through III-D**

27 The Department finds that the SCPCAB made substantial changes to the
28 draft permit after the close of public comment period. Therefore, review of the
above 11 appeal comments submitted by Petitioner Boeing is granted.

1 **Boeing Comment IV**

2 **DTSC Should Adopt Federal Rules for Groundwater Monitoring**
3 **at Post Closure/Corrective Action Sites**

4 As noted throughout the foregoing comments, the permit
5 modification fails to consider the ongoing corrective action at SSFL
6 and the fact that the impoundments are among many historic
7 sources of groundwater impacts at the site. Most of the issues
8 raised in this request for review illustrate the difficulties that arise at
9 sites undergoing both post-closure and corrective action, where
10 both the impoundments and the SWMUs contribute to site-wide
11 impacts.

12 Regulation of the impoundments at SSFL within the ongoing
13 corrective action program could eliminate the costly, duplicative
14 sampling and analysis imposed under this modification, and would
15 harmonize the impoundments with the site-wide groundwater
16 remedy. USEPA has recognized that where both closed surface
17 impoundments and SWMUs are sources of releases, groundwater
18 monitoring requirements designed for the impoundments do not
19 provide sufficient flexibility to decide on remedies that reflect the
20 conditions and complexities of the entire site, and may
21 unnecessarily impede cleanup. See 63 Fed. Reg. 56710 (Oct. 22,
22 1998). Boeing and NASA request that, as a policy matter, DTSC
23 adopt the federal regulations and "eliminate some of the problems
24 Regions and States have encountered *where two sets of*
25 *requirements apply at a cleanup site – requirements for closure at*
26 *the regulated unit and corrective action requirements at the*
27 *SWMUs."* 63 Fed. Reg. at 56710, 56724 (Oct. 22, 1998).

20 **Response to Boeing Comment IV**

21 This appeal comment does not request review of a condition of the permit.
22 The petitioner is stating that if a different state regulatory scheme existed, then
23 the permit conditions would be different. The permit process is not the proper
24 forum for addressing the adoption of a new regulatory scheme. Accordingly,
25 DTSC finds that Petitioner has failed to meet the burden to establish that the
26 DTSC should grant a review of this issue pursuant to the criteria set forth in
27 California Code of Regulations, title 22, section 66271.18(a) and, for this reason,
28 denies review of Boeing Comment IV.

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Chandler Comment 1

Inappropriate Use of Notice of Exemption for Class 2 Permit Modification for the Two Boeing Hazardous Waste Facilities

The use of a notice of exemption for this discretionary action on the part of DTSC is inappropriate. DTSC is making significant changes to the monitoring and response programs for both Boeing facilities. No basis has been provided as to why reduced sampling frequencies, for example, would not jeopardize early detection and response to additional releases from the units to media or from one medium to another - -such as from the fractured bedrock into groundwater. In other words, the impacts of the proposed permitted activity are unknown at the time of the permit decision. I petition that DTSC reconsider its use of a notice of exemption.

Response to Chandler Comment 1

This appeal comment does not request review of a condition of the permit and does not raise issues that merit review pursuant to California Code of Regulations; title 22, section 66271.18 (a). This appeal comment pertains to the CEQA issues for this project. CEQA provides a separate judicial appeal process to resolve disputes concerning compliance with CEQA. This appeal proceeding is not the proper forum in which to raise issues concerning compliance with CEQA. For these reasons, review of Chandler Comment 1 is denied.

Chandler Comment 2

The DTSC has determined that Petitioner Chandler's Comment 2 below has two issues. In order to clarify the analysis of this comment, it has been edited and separated into two subparts to form Chandler Comment 2a and Chandler Comment 2b.

1 **Inappropriate and Deceptive DTSC Policy of Changes to the**
2 **Groundwater Sampling Frequency for Point of Compliance,**
3 **Background, Detection, Evaluation, and Corrective Action**
4 **Monitoring and Response Programs**

5 Chandler Comment 2a

6 Petitioner Chandler is appealing the minimum sampling frequency
7 allowable for all media covered under California Code of
8 Regulations, title 22, chapter 14, article 6 throughout the two post-
9 closure permits. Petitioner Chandler provides examples as follows:

10 p. 3, ¶ 2 - [Point of Compliance] (06)
11 "...may be changed to semi-annual"

12 p. 4, ¶ 4 - [Background] (11) – "Background wells shall then be
13 tested for Table 3 and Table parameters annually."

14 p. 8, ¶ 1 - (30) [Appendix IX] "...on the frequency and"listed in
15 Table 2.

16 p. 12, ¶ 2 - (34) [Detection Monitoring]
17 "...may be reduced to semi-annual..."

18 p. 13, ¶ 4 - (37) [Detection Monitoring]
19 "... may be sampled semi-annually ... and annually..."

20 p. 15, ¶ 4 - (41) [Evaluation Monitoring]
21 "...may be sampled semi-annually..."

22 p. 16, ¶ 5 - (43) [Evaluation Monitoring]
23 "...on a semi -annual basis..."

24 The regulations are clearly being abused and misinterpreted in a
25 fashion contradictory to the intent of Health and Safety Code, in
26 that DTSC interprets these regulations as allowing the selection of
27 any groundwater monitoring frequency it so chooses to require in
28 operating and post-closure permits and corrective action. The
mechanism of a variance exists in the regulations and statutes if
DTSC has a reasonable basis for reducing the groundwater
monitoring frequencies. California Code of Regulations, title 22,
section 66264.97(e)(12) (states that B) (1) either four samples be
obtained at least semi-annually from each monitoring point or (B)
(2) that not less than one sample quarterly be obtained from each
monitoring point. This applies to each medium. The Department

1 shall require more frequent samples as necessary. With the
2 ground water medium, such increases in frequency shall be based
3 on rate of groundwater flow, etc. DTSC has twisted this language
4 to carve out a special exemption for ground water as opposed to
5 other media where somehow groundwater sampling can become
6 less frequent. This is inappropriate and contrary to the meaning
7 and intent of the regulations. If DTSC doesn't like a regulation, it
8 should engage in rulemaking not circumvention.

9 I appeal each and every instance where the groundwater sampling
10 frequency has been arbitrarily reduced.

11 **Response to Chandler Comment 2a**

12 The Department finds that the SCP CAB made substantial changes to the
13 draft permit after the close of public comment period. Therefore, the Department
14 grants review of the permit conditions captured by Chandler Comment 2a.

15 **Chandler Comment 2b**

16 The DTSC has a policy of setting sampling frequencies at longer
17 intervals than a quarterly frequency. These actions have the effect
18 of undercutting existing regulations to specify particular
19 environmental monitoring details. In doing so, DTSC policy of
20 sampling frequency reduction becomes an underground regulation.
21 I petition that DTSC either issue a variance from the existing
22 regulations [California Code of Regulations, title 22, section
23 66264.97(e)(12)(B)(1) or rewrite the permit to include the required
24 quarterly monitoring f[or] the wells in the various monitoring and
25 response programs. I also petition that DTSC submit this question
26 of this continuing subversion of existing regulations by policy to the
27 Office of Administrative Law for determination.

28 **Response to Chandler Comment 2b**

Petitioner Chandler has standing to petition for review of issues that pertain
only to changes from the draft to the final permit decision. Comment 2b does not
request review of a condition of the permit nor does it identify a specific change
in the draft permit to the final permit. Petitioner Chandler has not identified a
policy that has affected a permit condition. The process of determining
monitoring programs for RCRA regulated sites is site specific and is

1 characterized by extensive interaction between the facility, the Department, and
2 interested persons. The Department has the statutory authority and mandate to
3 impose permit conditions on a case-by-case basis to ensure that monitoring
4 activities provide adequate information for protection of the environment and
5 public health [See Health & Saf. Code § 25200, subs. (a) and (d)(2); Cal. Code
6 Regs., tit. 22, § 66270.32, subs. (b)(1) and (2)]. The Department finds that
7 Petitioner has failed to meet the burden to establish that the Department should
8 grant a review of this issue pursuant to the criteria set forth in California Code of
9 Regulations, title 22, section 66271.18(a) and, for this reason, denies the petition
10 for review.

11 12 **Chandler Comment 3**

13 **Specification Problems**

14 p. 11, ¶ 3 - (32) - DTSC fails to provided specification---it merely
15 states that some specification exists in California Code of
16 Regulations, title 22 66264.97 (b)(4) through (b)(7). However,
17 California Code of Regulations, title 22, section 66270 .31 (a) states
18 in part, that all permits shall specify "requirements concerning
19 proper use, maintenance, and installation, when appropriate, of
20 monitoring equipment or methods..." and 66264.91(b) which states,
21 in part, "The Department shall specify in the facility permit the
22 specific elements of each monitoring and response program." By
reducing the amount of specification, DTSC contravenes its own
regulations again. More detail, rather than less should be provided.
I petition that adequate detail be provided in the permit as to what
the Permittee must do to properly construct wells, etc.

23 **Response to Chandler Comment 3**

24 The Department finds that Petitioner Chandler has failed to demonstrate
25 that this permit condition is based upon a finding of fact or conclusion of law
26 which is clearly erroneous. The Department specifies in the permit that all wells
27 shall be properly constructed and include the specifications under California
28 Code of Regulations, title 22, section 66264.97 (b)(4) through (b)(7). This

1 condition establishes the criteria for preventative design and places a
2 responsibility on the permittee to appropriately design and construct monitoring
3 equipment. The exact design requirements are specified upon application and
4 issuance of a well construction permit. Requiring each construction detail to be
5 included in the permit would be the same as simply reprinting the construction
6 codes in the permit and would not aid in compliance with the permit. The
7 Petitioner has failed to meet the burden to establish that the Department should
8 grant a review of this issue pursuant to the criteria set forth in California Code of
9 Regulations, title 22, section 66271.18(a) and, for this reason, review requested
10 under Chandler Comment 3 is denied.

11 12 **Chandler Comment 4**

13 **WQSAP Usage**

14 p. 12, ¶ 4 - (35) I petition that DTSC discard the use of WQSAP
15 when a facility is being regulated under California Code of
16 Regulations, title 22, section 66264. This term is not mentioned
17 therein. The regulations clearly refer to monitoring and response
18 programs under article 6, e.g. California Code of Regulations, title
19 22, section 66264.91(a).

20 **Response to Chandler Comment 4**

21 The Department finds that Petitioner Chandler has failed to demonstrate
22 that inclusion of the acronym WQSAP within a permit condition is based upon a
23 finding of fact or conclusion of law which is clearly erroneous. The acronym
24 WQSAP is in reference to the "Regulated Unit, Water Quality Sampling and
25 Analysis Plan" report dated May 2003 and prepared by Haley & Aldrich, Inc. The
26 report details the groundwater monitoring programs for Area II and Areas I and
27 III. WQSAP is used in the permit merely to establish cohesive terms associated
28 with this supporting document. The Petitioner has failed to meet the burden to
establish that the Department should grant a review of this issue pursuant to the

1 criteria set forth in California Code of Regulations, title 22, section 66271.18(a)
2 and, for this reason, review requested under Chandler Comment 4 is denied.

3 4 **Chandler Comment 5**

5 The DTSC has determined that Petitioner Chandler's Comment 5
6 below can be interpreted as two separate comments. In order to clarify
7 the analysis of this comment, it has been edited and separated into two
8 subparts to form Chandler Comment 5a and Chandler Comment 5b.

9 **Appendix IX Twists**

10 **Chandler Comment 5a**

11 p. 8, ¶ 8 - (29) - DTSC mistakes what the regulations mean by
12 "affected medium". In the second of two paragraphs, DTSC states
13 that "Appendix IX sampling is not required for monitoring points
14 outside of the affected medium until and/or unless releases from a
15 regulated unit reach or is suspected to have reached the monitoring
16 point." The regulations say nothing like this. Medium refers to
17 either groundwater, surface water, or soil-pore liquid. Therefore
18 affected medium means if ground water is contaminated. The
19 medium in that instance is all ground water not just ground water
20 where monitoring points have exhibited contamination. DTSC is
21 attempting to artificially restrict the California Code of Regulations,
22 title 22, (section 66264.99(e)(6) which states that "the owner or
operator shall analyze samples from all monitoring points in the
affected medium." This means all wells that are called out as
monitoring points not just the ones that are dirty. I petition that
DTSC remove the last sentence from the paragraph here, and go
through the rest of the Appendix IX conditions and properly apply
the regulations.

23 **Response to Chandler Comment 5a**

24 The Department finds that the SCPCAB made substantial changes to the
25 draft permit after the close of public comment period. Therefore, the Department
26 grants review of the permit conditions captured by Chandler Comment 5a.

1 Chandler Comment 5b

2 ... DTSC is attempting another underground regulation to save
3 Boeing money with respect to the expensive Appendix IX
4 monitoring. DTSC should use the variance process rather than
5 trying twist and contort regulations in an end run. ...

6 **Response to Chandler Comment 5b**

7 Petitioner Chandler has standing to petition for review of issues that pertain
8 only to changes from the draft to the final permit decision. Comment 5b does not
9 request review of a condition of the permit, nor does this comment identify any
10 change from the draft to the final permit. The comment has failed to demonstrate
11 that inclusion of a permit condition represents a finding of fact or conclusion of
12 law which is clearly erroneous. The Department has the statutory authority and
13 mandate to impose permit conditions on a case-by-case basis to ensure that
14 monitoring activities provide adequate information for protection of the
15 environment and public health. [See Health & Saf. Code § 25200, subds. (a) and
16 (d)(2); Cal. Code Regs., tit. 22, § 66270.32, subds. (b)(1) and (2)]. The
17 Department finds that Petitioner has failed to meet the burden to establish that
18 the Department should grant a review of this issue pursuant to the criteria set
19 forth in California Code of Regulations, title 22, section 66271.18(a) and, for this
20 reason, denies the petition for review.

21
22 **Chandler Comment 6**

23 The DTSC has determined that Petitioner Chandler's Comment 6 below
24 has two parts. In order to clarify the analysis of this comment, it has been
25 separated into two subparts; Chandler Comment 6a and Chandler Comment 6b.
26
27
28

1 **Failure to Adequately Address Environmental Media**

2 Chandler Comment 6a

3
4 P.11, ¶ 6 to 8 - (33) DTSC has removed the unfortunate impression
5 in the original permits that ground water is the only medium to
6 which environmental monitoring applies at this facility. It is nice to
7 include surface water and soil-pore liquid. However, DTSC cites
8 only the vadose zone monitoring that deals with soil-pore liquid.
9 There is something wrong with the decision of DTSC to apparently
10 neglect other media such as soil-pore gas - - - especially given the
11 constituents such as trichloroethylene. Specifically, if ground water
12 has not been impacted but is threatened by continuing waste
13 discharge, it would be prudent to have instituted vadose monitoring
14 to determine if contaminants in the landfill are in fact migrating
15 towards ground water. If so, actions should then be taken to
16 prevent discharge into ground water or the WDRs need to reflect
17 the amount of such discharge that will be allowable (a seeming
18 conflict with the anti-degradation policy). Vadose zone monitoring
19 is the early warning system is most preferable - - - groundwater
20 monitoring is in effect a backup.

21
22 Damning as well is the failure of DTSC to provide the soil-pore
23 liquid and surface water protection specifications, etc. required by
24 the regulations for these media. For example, DTSC fails to specify
25 concentration limits for either surface water or soil-pore liquid, as
26 required by California Code of Regulations, title 22, section
27 66264.94(b), which states in part, "...each concentration limit and
28 each statement shall be specified in the facility permit.

29
30 In addition to petitioning DTSC to include in the permit modification
31 those elements required by the regulations but missing from the
32 original permit with respect to the additional media- - -surface water
33 and soil-pore liquid [see California Code of Regulations, title 22,
34 section 66264.94(b), 66 264.92(a), 66264.91(b), 66264.93,
35 66264.95(a), 66264.98(d),(e),(f),(g), 66264.99(e)(2) and (3),
36 66264.100(b), (c), (e)], the permit modification(s) is incomplete. I
37 also petition DTSC to sort out the issue of gas-phase monitoring
38 since that medium appears totally ignored for the vadose zone.

39 Chandler Comment 6b

40
41 DTSC has avoided pore liquid and pore gas monitoring in fractured
42 bedrock. DTSC continues to ignore that under Porter-Cologne, it
43 has no right to allow discharge or threat of discharge into ground
44

1 water from its waste units. Detection monitoring in ground water is
2 not an acceptable substitute for vadose zone monitoring which may
3 lead to prevention or amelioration of discharge into ground water. I
4 petition that a pore liquid monitoring response program (MRP) be
included in the permit for the unsaturated fractured rock and that a
pore gas program be added in accordance with article 17.

5 **Response to Chandler Comments 6a and 6b**

6 The Department finds that the SCPCAB made substantial changes to the
7 draft permit after the close of public comment period. Therefore, the Department
8 grants review of the permit conditions captured by Chandler Comment 6a and
9 6b.

10 11 **Chandler Comment 7**

12 **Failure to Specify Potential Environmental Contaminants for** 13 **the Vadose Zone and Surface Water Monitoring and Response** 14 **Programs**

15 P.11, ¶ 4 to ¶ 8 - (33) A groundwater protection standard (GWPS)
16 is required to be established by DTSC under title 22 CCR 66264.92
17 which shall consist of the list of constituents of concern (COCs)
18 [title 22 CCR §66264.93], concentration limits [title 22 CCR
19 §66264.94], and the points of compliance (POCs) and all
20 monitoring points [title 22 CCR §66264.95]. However, in
21 accordance with title 22 CCR §66264.93, DTSC is particularly
22 required to specify in the permit- -not in the permittee's application
23 out in the ether somewhere - - those COCs for the post-closed
24 unit to which the GWPS shall apply. These COCs shall be all
25 waste constituents, reaction products, and hazardous constituents
26 that are reasonably expected to be in or derived from waste
27 contained in the closed unit. DTSC fails to do that in this permit
28 modification for the media that it has properly added. I petition that
the inappropriate practice of failing to meet regulatory requirements
to specify the GWPS be reviewed and the permit rewritten to fulfill
the §66264 regulations.

26 **Response to Chandler Comment 7**

27 Petitioner Chandler has standing to petition for review of issues that
28 pertain only to changes from the draft to the final permit decision. Comment 7

1 does not request review of a condition of the permit. California Code of
2 Regulations (CCR), title 22, section 66270.32(e), states that "all permit conditions
3 shall be incorporated either expressly or by reference." When a permit
4 application is incorporated by reference in a permit, it becomes a part of the
5 permit and is embodied in the term "permit" as used in the Department's
6 regulations, including those regulatory provisions that set forth the requirements
7 that must be "specified" in the permit. Chapter 14 (of CCR Division 4.5, Title 22)
8 has numerous requirements to include specific items and conditions "in the
9 permit." To interpret the phrase "specify in the permit" to require the Department
10 to spell out the required elements in the permit, so as to preclude use of the
11 "incorporation" by reference option, would render California Code of Regulation,
12 title 22, section 66270.32(e) meaningless. The Petitioner has failed to meet the
13 burden to establish that the Department should grant a review of this issue
14 pursuant to the criteria set forth in California Code of Regulations, title 22, section
15 66271.18(a) and, for this reason, review requested under Chandler Comment 7
16 is denied.

17 18 **Chandler Comment 8**

19 **Financial Responsibility for New Post-Closure Care Conditions** 20 **and Corrective Action in the Permit Modifications**

21 P.12 ¶ 1 and 2 - The assurance of financial responsibility (AFR) for
22 corrective action is required by statute to be included in permits
23 issued by DTSC. Since new monitoring and response programs
24 are being required, why isn't this addressed? Why isn't the
25 assurance of financial responsibility for post-closure care
26 addressed? It is believed that these permits, together with the
27 modifications, are inconsistent with and contradictory to the intent
28 of H&SC) §25200.10(b). H&SC requires that, "*When corrective
action cannot be completed prior to issuance of the permit, the
permit shall contain schedules of compliance for corrective action
and assurances of financial responsibility for completing the
corrective action.*" [H&SC § 25200.10 (b)] Title 22 states "*That the
permit or order [emphasis added] will contain schedules of*

1 *compliance for such corrective action (where such corrective action*
2 *cannot be completed prior to issuance of the permit) and*
3 *assurances of financial responsibility for completing such corrective*
4 *action.” [Title 22 CCR §662 64.101 (b)] I petition that this permit*
5 *modification be rewritten and the permittees required to have in*
6 *place an updated AFR for post- closure care changes brought by*
7 *conditions in the modifications as well as corrective action AFR and*
8 *a compliance schedule before issuance.*

9 **Response to Chandler Comment 8**

10 DTSC finds that Petitioner Chandler has failed to meet the burden to
11 establish that the Department should grant a review of this issue pursuant to the
12 criteria set forth in California Code of Regulations, title 22, section 66271.18(a)
13 and, for this reason, denies the petition for review. Provisions for financial
14 assurance are contained in the permit modification for Areas I and III (PC-94/95-
15 3-02, MOD SC3-111904-A), specifically Part II-E.1, and Part III-J(1-4) and Part
16 III-K. Provisions for financial assurance are contained in the permit modification
17 for Areas II (PC-94/95-3-03, MOD SC3-111904-B), specifically Part II-E.1. These
18 provisions were not changed from the close of the public comment period on the
19 draft permit to the issuance of the final permit. Petitioner Chandler only has
20 standing to comment on changes to the permit from the draft to final form.

21 **VI. ORDER**

22 For the reasons set forth above, DTSC grants the Petitioner Boeing's
23 petition for review for Comments II-A through II-G, and III-A through III-D; and,
24 denies Petitioner Boeing's petition for review for Comment IV. For the reasons
25 set forth above, DTSC grants Petitioner Chandler's petition for review of
26 comments 2a, 5a, 6a, and 6b; and, denies Petitioner Chandler's petition for
27 review of comments 1, 2b, 3, 4, 5b, 7 and 8.

28 Pursuant to California Code of Regulations, title 22, section 66271.18(c),
the Department will public notice a briefing schedule for those comments for

1 which review has been granted. Interested parties will be given an opportunity to
2 file written arguments pertaining to the comments which have been granted
3 review in accordance with the briefing schedule.

4 During the pendency of this permit appeal, the two permit modifications
5 remain stayed pursuant to California Code of Regulations, title 22, section
6 66271.15. During the pendency of this appeal, the Boeing Company may
7 continue to operate under the terms and conditions of the two Hazardous Waste
8 Facility Post-Closure Permits issued by DTSC in 1995.

9
10 DATED: November 4, 2008

11 //original signed by//

12 _____
13 Mohinder S. Sandhu, P.E.
14 Permit Appeals Officer
15 Department of Toxic Substances Control
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