

FILED

OCT 27 2005

HEARING BOARD
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

BEFORE THE HEARING BOARD
OF THE
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
STATE OF CALIFORNIA

**MARY ROMAIDIS
CLERK
HEARING BOARD
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT**

6	In the Matter of the Application of:)	Docket No. 3503
7	CARGILL SALT)	
8	For a variance from Regulation 2, Rule 1,)	ORDER GRANTING
9	Section 307 (Condition #19560, Item Nos. 1)	VARIANCE
10	and 2))	
11)	

12 The above-entitled matter is an Application for Variance from Bay Area Air Quality
13 Management District ("District") Regulation 2, Rule 1, Section 307 and from the provisions of
14 operating Permit Condition # 19560, Parts 1 and 2 for source S-5 (KD Salt Cooler) at Cargill Salt
15 ("Applicant"), Plant 94, located at 7220 Central Avenue, Newark, California 94560 ("Facility").
16 The Application for Variance was filed on September 22, 2005 and requested short-term relief
17 for the period from September 22, 2005 through October 31, 2005. At the hearing, Applicant
18 amended the variance request to cover the time period from September 22, 2005 through and
19 including October 6, 2005.

20 Teri Peterson, Environmental Engineer, and Thomas Miller, Plant Manger, of Cargill Salt
21 appeared on behalf of Applicant.

22 Susan Adams, Assistant District Counsel, appeared for the Air Pollution Control Officer
23 ("APCO").

24 The Clerk of the Hearing Board provided notice of the hearing on the Application in
25 accordance with the requirements of the Health and Safety Code. The Hearing Board heard the
26 request for variance on October 13, 2005.
27

ALB

1 The Hearing Board provided the public with an opportunity to testify at the hearing, as
2 required by the Health and Safety Code. No members of the public testified. The Hearing Board
3 received evidence from both parties. The APCO did not oppose the granting of the Variance.

4 The Hearing Board received evidence and took the matter under submission for decision.
5 After consideration of the evidence, the Hearing Board voted to grant the request for variance, as
6 set forth in more detail below:

7 **BACKGROUND**

8 In connection with Applicant's salt production operations, Applicant operates a kiln-dried
9 ("KD") salt production line for the production of salt for water softening, agriculture, animal
10 feed, food grade, and other uses. Approximately 65% of Applicant's production and sales of salt
11 is produced by the KD product line. An integral piece of equipment in the production process is
12 the KD salt cooler, permitted with the District as S-5. In the process, salt leaves a drier at
13 approximately 260 degrees and enters S-5, where it is cooled to approximately 180 degrees.
14 Untreated salt, particularly at high temperatures, readily absorbs water from the atmosphere,
15 causing it to cake up. The hygroscopic quality of the salt precludes Applicant from keeping a
16 reserve of salt to overcome a shortfall of KD salt during inoperation of S-5.

17 Permit Condition #19560 for S-5 requires that S-5 be abated by dry dust collector A-21
18 during all periods of operation and that emissions from A-21 shall be less than 0.01 grains per
19 dry standard cubic foot (gr/dscf) of exhaust.

20 On September 19, 2005 the duct connecting S-5 to A-21 failed and fell across an
21 employee walkway. Applicant concluded that salt dust had caked in the duct and that the duct's
22 structural supports were unable to support the combined weight of the duct and the caked salt.
23 S-5 and A-21 were immediately shutdown. Applicant determined that employee safety
24 considerations made it infeasible to reconnect the existing ducting due to the compromised
25 integrity of the ducting. Applicant contacted District staff and connected S-5 to another
26 permitted abatement device, wet scrubber A-1/A-2, to abate PM-10 emissions prior to restarting
27 the KD production process.
28

1 Source Test results during July, 2005 of A-1/A-2, both with and without S-5, provide a
2 reasonable basis to estimate that during the period of the variance the increase in emissions from
3 the abatement device due to S-5 are 0.018 gr/dscf, or 0.008 gr/dscf over the permit limit
4 specified in Permit Condition #19560.

5 Applicant has a preventative maintenance program that includes internal inspection,
6 clean-out and maintenance of A-21 every 45 days. However, due to salt dust caking in the dry
7 dust collector, Applicant also cleans-out A-21 on a weekly basis. No problems were revealed
8 during weekly cleanings. Inspections and cleanings were not previously conducted on the duct
9 connecting S-5 to A-21 as Applicant expected that the draft in the duct would prevent salt
10 accumulation in the duct. The duct is 60 feet long. It rises vertically from S-5 to approximately
11 fifteen feet above the floor to a ninety-degree bend and continues laterally to A-21. The duct
12 lacked a means of inspection absent complete disassembly. Applicant has not experienced salt
13 dust caking in ducts leading to any of its other dust collectors, all of which are longer. The A-21
14 duct was four years old prior to its collapse.
15

16 During the period for which the variance was requested, the Applicant replaced the
17 galvanized steel ducting with schedule 40 carbon steel pipe with 10 large inspection doors, and
18 relocated the duct close to the ground, making it possible to inspect and clean out the duct safely.
19 During the same time period, Applicant replaced all of the dust collection bags in A-21. On
20 October 6, 2005 Applicant restarted A-21 and has been in compliance with all permit conditions
21 since that time. S-5 ran for 17 days abated by the A-1/A-2. During this time there were no
22 complaints and no visible emissions from the outlet of A-1/A-2.

23 DISCUSSION

24 Applicant stated that the duct is shortest in length of all ducts at the Facility. None of the
25 other ducts at the Facility have failed or experienced problems with salt dust caking in them.
26 The caked salt dust had collected on a lateral portion of the duct, rather than at the bend.

27 Applicant responded quickly and diligently to repair the duct. Significantly, during the
28 duct repair and replacement, Applicant took measures to prevent such failures in the future by

1 installing the duct along the floor and installing inspection doors in the duct. The Applicant has
2 revised the weekly cleaning procedure for A-21 to include inspection of the duct. Applicant
3 confirmed it had completed all repair work, reconnected S-5 to A-21, and restored the Facility to
4 compliance with Permit Condition No. 19560, Parts 1 and 2 by the end of day on
5 October 6, 2005. Applicant agreed to modify the period of the variance to September 22, 2005
6 through October 6, 2005. Applicant also agreed to submit calculation of its excess emissions
7 during the variance period to the Hearing Board and the District, in writing, and to submit
8 payment of emissions fees to the Hearing Board.

9 **SPECIFIC FINDINGS**

10 The Hearing Board finds pursuant to Health and Safety Code Section 42352 that:

11 1. Applicant was in violation of Regulation 2, Rule 1, Section 307 (Condition # 19560, Item
12 Nos. 1 and 2), which requires operation in compliance with existing permit conditions. Permit
13 Condition 19560 requires S-5 to be abated by dry dust collector A-21 during all periods of
14 operation and achievement of 0.01 gr/dscf at the exhaust of A-21.

15 2. Due to conditions beyond the reasonable control of the Applicant, unforeseen
16 circumstances - salt dust caking in the duct - resulted in the failure of the duct between S-5 and
17 A-21. Applicant was current with an extensive preventative maintenance program and cleaning
18 schedule for A-21. In the past salt dust caking in the ducts, as opposed to the dust collector, has
19 never been a problem.

20 Requiring compliance with Permit Condition #19560 would have required Applicant to
21 shut-down its KD salt production process during repairs, causing Applicant to incur economic
22 losses of at least \$60,000 per day and potential loss of Applicant's customers.

23 Applicant took steps to otherwise abate the PM-10 emissions from S-5 while repairs were
24 made, and the repairs resulted in improvements to the duct system, facilitating easy access to the
25 duct for inspections and clean-outs.

26
27 3. The hardship resulting from requiring immediate compliance with Permit Condition
28 #19560, Parts 1 and 2, would be without a corresponding benefit in reducing air contaminants.

1 Although shutting down the KD salt process during repairs would have eliminated emissions
2 from S-5, Applicant abated PM-10 emissions using an alternate abatement device during the
3 period of repairs, which based on Source Test results, resulted in emissions from A-1/A-2 due to
4 S-5 being 0.008 gr/dscf higher than the limit specified in Permit Condition #19560. This
5 increase, when weighed against the economic loss to the Applicant and impacts to its customers,
6 supports the conclusion that the hardship to the Applicant is without a corresponding benefit.

7 4. Curtailment of S-5 would have precluded Applicant from continuing its KD salt
8 production, which is approximately 65% of its business at the Facility. The Applicant is unable
9 to operate the KD salt production process without S-5. The other two salt production processes,
10 which account for roughly only 35% of salt production, would be unable to supply the quantity
11 or type of salt to meet customer demand. Applicant could not keep a reserve of salt to supply
12 customers during a shutdown of S-5. By obtaining a variance, the Applicant was able to meet
13 customer needs, temporarily abate dust emissions with an alternate abatement device, and make
14 improvements to the existing duct to reduce the likelihood of future incidents and improve safety
15 conditions.

17 5. During the period of the requested variance the applicant reduced excess emissions to the
18 maximum extent feasible by abating PM-10 from S-5 with wet scrubber A1/A2.

19 The Applicant has also undertaken mitigation measures to prevent similar future
20 incidents by lowering the ducting for easy access and installing doors for inspection and
21 cleaning. The Applicant has revised the weekly cleaning procedure for A-21 to include
22 inspection of the duct.

23 6. Applicant has provided Source Test results that show excess emissions from A-1/A-2
24 attributable to S-5. Based on the Source Test results, and the actual number of hours that the
25 Applicant operated S-5 during the variance period abated by A-1/A-2, Applicant is able to
26 estimate that excess emissions during the time period were approximately 1,064 pounds of
27 Particulate Matter.

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THEREFORE, THE HEARING BOARD ORDERS:

A variance is hereby granted from Regulation 2, Rule 1, Section 307, Condition #19560, Items 1 and 2, for the period of September 22, 2005, through and including October 6, 2005, subject to the following conditions:

1. Applicant shall quantify actual excess emissions and submit a report, in writing, to the Hearing Board and the District within 30 days of the hearing date; and
2. Applicant shall pay excess emission fees for 1,063.90 pounds of PM-10, pursuant to District Regulation 3, and subject to confirmation by the aforementioned report.

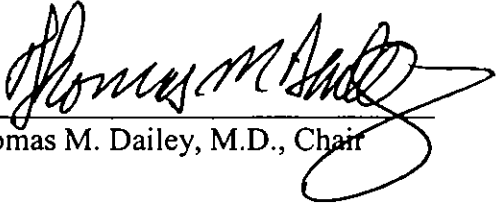
Moved by: Christian Colline, P.E.

Seconded by: Terry A. Trumbull, Esq.

AYES: Christian Colline, P.E., Julio Magalhães, Ph.D., Allan R. Saxe, Esq.,
Terry A. Trumbull, Esq., and Thomas M. Dailey, M.D.

NOES: None

ABSTAINED: None


Thomas M. Dailey, M.D., Chair

10-27-05
Date