

GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT



GOVERNING BOARD MEETING INFORMATION

Meeting Date & Time

Friday, April 1, 2011

10:00 am

Meeting Location

Great Basin Unified Air Pollution Control District

157 Short Street

Bishop, California

District Board

Brad Mettam, Inyo County, Chairman

Robert Michener, Inyo County, Vice-Chairman

Peter Pumphrey, Mono County

Vacant, Mono County

Chris Gansberg, Alpine County

Theodore D. Schade, Air Pollution Control Officer

157 Short Street, Bishop, California 93514

(760) 872-8211 E-mail: tschade@gbuapcd.org

Theodore D. Schade
Air Pollution Control Officer



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537 www.gbuapcd.org
Tel: 760-872-8211 Fax: 760-872-6109 info@gbuapcd.org

PUBLIC NOTICE

BEFORE THE HEARING BOARD OF THE GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

To Consider the Granting of a Short Variance, Case No. GB11-01

Pursuant to Cal. Health & Safety Code § 40825, **10 Day Notice of Variance up to 90 Days.** The public is hereby notified that a hearing will be held before the Great Basin Unified Air Pollution Control District (District) Hearing Board to consider a petition in the matter of a Short Term Variance requested by CR Briggs Corporation. The hearing will be held at the District Office, located at 157 Short Street, Bishop, CA, on April 1, 2011 at 10 am. CR Briggs is requesting that the District Hearing Board allow them to temporarily operate diesel engines without required pollution controls while they replace the catalyst in the nitrogen dioxide control device and do necessary maintenance on the pollution monitoring equipment.

Interested persons wishing to attend the hearing should notify the Hearing Board Clerk (760) 872-8211, no later than March 31, 2011 to be notified of any schedule changes for the hearing.

Duane Ono
Deputy Air Pollution Control Officer
DATED: March 18, 2011



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537
760-872-8211 Fax: 760-872-6109

AGENDA

MEETING OF THE HEARING BOARD

APRIL 1, 2011

**Great Basin Air Pollution Control District
157 Short Street
Bishop, CA 93514**

(All Meetings Are Mechanically Recorded)

1. Call meeting to order
2. Public comment on matters not on the agenda (No-action item)

Public Hearing Procedures for each public hearing below. The Chairman will open the public hearing

and then:

Swearing in of witnesses by Hearing Board Clerk.

Statement and presentation by District staff.

Statement and presentation by Petitioner.

Questions from the Hearing Board.

Call for testimony from those persons wishing to speak in support.

Call for testimony from those persons wishing to speak in opposition.

Call for general testimony.

Rebuttal to previous testimony by Petitioner.

Close the public hearing, terminate public testimony.

The Hearing Board will deliberate and arrive at a Findings and Order decision.

3. **PUBLIC HEARING:** Consideration of granting a short-term variance to CR Briggs Corporation allowing them to operate their power plant without any control of monitoring of their NO_x emissions.

4. Adjournment

Ellen Hardebeck
Control Officer



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street * Bishop, California 93514 * (760)872-8211 * Fax(760) 872-6109

**PETITION FOR HEARING BEFORE
THE GREAT BASIN UNIFIED AIR POLLUTION CONTROL
DISTRICT HEARING BOARD**

PETITIONER: CR BEYGS CORP DATE: 3/17/11

TITLE: EMMA PAETHORPE, ENVIED. COORD. TELEPHONE: (760) 372 4233

INDIVIDUAL: CO-PARTNERSHIP: CORPORATION: OTHER:

If other, please explain.

ADDRESS: CITY:

LOCATION AND TYPE OF BUSINESS ACTIVITY INVOLVED:

8 MIS S OF GALWAT ON WINGATE RD, TRONA CA 93562
MINING

GIVE A BRIEF STATEMENT DESCRIBING THE REASONS FOR WHICH THE PETITION IS FILED, TO INCLUDE THE FOLLOWING:

1. Identify the particular Section of the California Health & Safety Code, or the Great Basin Unified Air Pollution Control District's Book of Rules & Regulations involved:
206

2. Facts or explanation to justify action being requested by the Petitioner:
SCR ON POWER GENERATION PLANT REQUIRES INSPECTION AND SOME REPLACEMENT. COMS INSTRUMENTS REQUIRE SERVICE & CALIBRATION

3. The final date when petitioner will be in full compliance with the California Health & Safety Code Section or Rule cited in item 1 above:
TRD; WITHIN SHORT TERM TIME FRAME

4. Discuss the hardship the petitioner will encounter should variance relief not be granted. Would this action result in the practical closing and elimination of a lawful business, or result in the arbitrary or unreasonable taking of property?
THE GENSETS POWER THE MILL; INCLUDES PUMPS REQUIRING PROCESS SOLUTION, PROCESS PANS, AN AUXILIARY BUILDINGS AND OFFICES.

5. Is this petition also to be considered as an Interim Variance Petition, allowing above operations to continue, pending a Hearing Board decision or 90 days, which ever comes first? Yes No

**PETITION FOR HEARING BEFORE
THE GREAT BASIN UNIFIED AIR POLLUTION
CONTROL DISTRICT HEARING BOARD (Page 2)**

- 6. If the compliance schedule extends beyond an applicable Federal attainment date for an ambient air quality standard, the petitioner must submit adequate documentation with substantiating calculations which demonstrate the variance will not interfere with the attainment and maintenance of an ambient air quality standard.

AS PER REQUEST

- 7. Discuss the advantages and disadvantages to the residents of the district resulting from requiring compliance or resulting from granting a variance:

THE GENERATOR POWER RUMPS THAT REQUIRE THE FLOW OF
PROCESS SOLUTION AND REQUIRE ITS CONTAINMENT

- 8. During the period the variance is in effect to what extent is the Petitioner able to reduce excess emissions:

TO THE EXTENT ALLOWED BY THE CATALYST WHEN IN OPERATION

The undersigned, under penalty of perjury, states the above Petition and the items therein set forth are true and correct.

DATED: 3/17/11 PETITIONER: [Signature]

If signed by other than the petitioner, describe the authority to sign.

- 1) An emergency variance shall be exempt from filing fees as required by Rule 601.
- 2) Regular Hearing Board Filing Fee \$150.00 per Petition. \$168.00
- 3) File the variance petition in duplicate with:

Hearing Board Clerk
Great Basin Unified Air Pollution
Control District Hearing Board
157 Short Street, Suite 6
Bishop, CA 93514

4) Questions regarding this form should be directed to the Great Basin Unified APCD, phone (760) 872-8211.

(APCD 015)
(2/01/01)

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BEFORE THE HEARING BOARD
OF THE
GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

VARIANCE REQUEST

Petitioners: CR Briggs Corporation
Post Office Box 668
Trona, CA 93592

Request Received: March 17, 2011

Facility Location: CR Briggs
Wingate Road, 8 miles south of Ballarat
Panamint Valley, CA

Facility Mailing Address:

P.O. Box 668
Trona, CA 93592

Docket Number: GB11-01

**SUMMARY REPORT AND
STAFF RECOMMENDATION**

**SHORT-TERM VARIANCE
FOR RULE 206 & 210, PERMIT TO
OPERATE 796,
CONDITIONS 2, 8, 9 and 10**

Hearing Date: April 1, 2011, 10 AM

Location: 157 Short Street

Bishop, California

1 CR Briggs Corporation (Petitioner) is requesting a short term variance for District Rules 206 and
2 210, specifically for Permit to Operate (PTO) 796, conditions 2,8, 9 and 10, which limits the oxides of
3 nitrogen (NOx) emission from the power generation plant and requires the petitioner to operate a
4 continuous emission monitoring system (CEMS) for emissions of NOx from the power generation plant.
5 See attached PTO 796. If granted, this variance would allow Petitioner to operate their power plant
6 without any control of monitoring of their NOx emissions.

7 BACKGROUND

8
9 Petitioner operates a gold mining facility in Panamint Valley (located approximately 8 miles
10 south of Ballarat, California on Wingate Road). The petitioner is permitted to produce electric power
11 from four 1600 HP Caterpillar diesel engines. Currently, there are only three 1600 HP engines on site.

12 Diesel engines emit many pollutants. Petitioner is required to continuously monitor NOx emitted
13 by the engines. They do this with a device call a Continuous Emissions Monitoring System or CEMS.
14 The CEMS reads and records NOx emitted by the engines, and its readings also control the Selective
15 Catalytic Reduction (SCR) unit. The SCR unit reduces NOx to N₂ and H₂O by the reaction of NOx and
16 ammonia (NH₃) within a catalyst bed.

17 Catalysts look something like boxes of square ceramic straws. The straws run parallel to the
18 flow of the exhaust. The actual reaction takes place on a thin layer of active coating on the straws.
19 Catalyst do not last indefinitely, they must be replaced or regenerated on a regular basis. This Johnson
20 Matthey catalyst was guaranteed to reduce NOx emission by 80% for 2 years. After 2 years, typically
21 another catalyst bed is added, or the catalyst is replaced or regenerated.

22
23 The SCR catalyst works best within a specific temperature range, between 520 and 850 degrees
24 Fahrenheit. If the temperature is too low, the ammonia reacts with other chemicals and coats the
25 catalyst so it cannot function, too high and the catalyst undergoes sintering (kind of like melting into the

1 substrate material). In the summer the facility was getting temperature readings higher than 850 degrees
2 Fahrenheit, and they added an exhaust temperature cooling system.

3 Ammonia (NH₃) is injected into the flue gas upstream of the catalyst. Too little NH₃ and the
4 NOx is not reduced, too much NH₃ and the NH₃ is emitted into the atmosphere (called ammonia slip).
5 Ammonia is recognized as a precursor to the criteria air pollutant particulate matter. NOx is also a
6 criteria pollutant. The US Environmental Protection Agency established both human health-based and
7 environmentally-based standards for "criteria" pollutants.

8 The CEMS is a precision measurement device. The CEMS measures the NOx concentration
9 along with catalyst temperature, exhaust flow rate and power output of the diesel engines in brake-
10 horsepower (BHP). Petitioner has requirements to do twice monthly 2-point calibration checks and
11 quarterly multi-point calibration checks. The petitioner is required to submit quarterly CEMS reports to
12 the District. The Petitioner also submitted to the District a Quality Assurance Plan, this is a document
13 that outlines calibration procedures and the maintenance requirements for the device.
14

15 The petitioner has budgeted and planned for this downtime. March 15, 2011, when the
16 Petitioners' Environmental Coordinator, Emma Palethorpe, telephoned the District, was the first the
17 District had heard of the planned downtime. Petitioner was previously granted variances for equipment
18 breakdowns related to the CEMS and SCR unit:

- 19 • 1999, repair CEMS NOx analyzer (GB1999-02).
- 20 • April and July 2002, replace SCR ammonia blower (GB2002-1, and GB2002-2).
- 21 • 2007, repair or replace the NOx CEMS (GB07-11).
- 22 • 2010, repair to CEMS / SCR (GB10-01). This variance followed the issuance of an NOV
23 for failing to operate the CEMS/SCR from October 2009 to February 2010.
24
25

1 Petitioner has shown good cause for the issuance of a variance, provided that the findings under
2 California Health and Safety Code (CH&SC) Sections 42352 and 42353 can be met (see Findings
3 below).

4 Petitioner is expected to provide testimony at the hearing to explain the steps taken to ascertain
5 the source(s) of the issues with the CEMS, SCR and catalyst and explain their anticipated time to
6 complete repairs.

7 8 FINDINGS

9
10 The request for a short term variance satisfies the findings under CH&SC §§ 42352 and 42353 for
11 granting a variance:

- 12
13
14 1. That the petitioner for a variance is, or will be in violation of Section 41701 of the Health and Safety
15 Code or any rule, regulation or order of the District.

16 The petitioner is in violation of District Rules 210, for failing to comply with Conditions 2, 8, 9 and
17 10 of PTO 796, and District Rule 206 for failing to maintain their monitoring device.

- 18
19 2. That due to conditions beyond the reasonable control of the petitioner, requiring compliance would
20 result in either (A) an arbitrary or unreasonable taking of property, or (B) the practical closing and
21 elimination of a lawful business.

22 If the petitioner had to undergo a long-term shut down to find the issues in the NOx control
23 equipment, there would be a loss of revenue due to a forced closure. If there is an extended shut-
24

1 down, it is possible that the Petitioner would have to lay-off some employees. There would be a loss
2 of tax revenue to Inyo County.

3
4 3. That the closing or taking would be without a corresponding benefit in reducing air contaminants.

5 Panamint Valley is mostly uninhabited. There are permanent residents at the Panamint Springs
6 Resort about 32 miles away, an uninhabited working limestone quarry about 20 miles away, the
7 unincorporated community of Trona about 14 miles away, and residents in Homewood Canyon and
8 Valley Wells approximately 11 miles away. Local stationary sources of air pollution, besides the
9 petitioners' would be the power generating diesel engine and gasoline station at Panamint Springs
10 Resort and dust from the limestone quarry operation.

11
12 4. That the applicant for the variance has given consideration to curtailing operation of the source in
13 lieu of obtaining a variance.

14 The SCR only operates when at least two of the diesel engines are in operation. One engine does
15 not produce enough heat to allow that catalytic reduction reaction to occur. To ascertain the
16 deficiencies in the NOx control system, at least two engines must be running. It will take time for
17 the Petitioner to schedule contractors and acquire the necessary parts to repair the CEMS and
18 possibly the SCR and exhaust temperature cooling unit. Meanwhile, the engines provide the power
19 necessary to move the process fluid and regulate its containment. The process fluid is a dilute
20 cyanide solution with an oxidant and lime to make the fluid's pH alkaline.

21
22
23 5. During the period the variance is in effect, that the applicant will reduce excess emissions to the
24 maximum extent feasible.
25

1 With the NOx control system down, there is no way to reduce emissions without curtailing
2 operations.

- 3
4 6. During the period the variance is in effect, that the applicant will monitor or otherwise quantify
5 emission levels from the source, if requested to do so by the District, and report these emission
6 levels to the District pursuant to a schedule established by the district.

7 If a variance is granted, the Petitioner should be required as a condition of the variance to estimate
8 and record NOx emissions as follows;

- 9
 - 10 • For each hour, estimate and record the NOx emissions from the power plant based on the
11 equation in condition 8, PTO 796.
 - 12 • For each hour estimate and record any excess NOx emissions greater than 27.2 lbs/hr, which
13 is the NOx limit in condition 2 of PTO 796.

- 14
15 7. No variance shall be granted if the operation, under the variance, will result in a violation of CH&SC
16 § 41700 [nuisance].

17 The District is not aware of any public complaints for odors or other nuisance conditions associated
18 with the petitioners' operation. Therefore, there is no reason to believe that the issuance of this
19 variance would result in a violation of CH&SC § 41700 [nuisance].

- 20
21 8. That continued operation is not likely to create an immediate threat or hazard to public health or
22 safety.

23 As this is an isolated facility, no threat to public health or safety is anticipated,
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STAFF RECOMMENDATIONS

1. District staff recommends that the Hearing Board issue a short term variance to the Petitioner for District Rules 206 and 210, specifically for Conditions 2, 8, 9 and 10 of Permit to Operate 796 with the following conditions:

- a) The Petitioner shall work with District staff to establish an expeditious schedule for repair and replacement of control equipment on the power plant. That once the deficiencies are ascertained, that the schedule be revised, and the District notified, of planned repair, startup and testing of the CEMS, SCR and catalyst.
- b) That within 90 days of the repairs being completed and the variance period ended, the petitioner shall test the exhaust emissions emitted from the power generator stack consistent with the requirements of PTO 796, Condition 12, and perform a Relative Accuracy Test Audit of the CEMS as specified in 40 CFR 60, Appendix B for Performance Specifications. Required tests shall be performed between 9am and 5pm, unless a different schedule is approved in writing by District staff.
- c) Estimate and record NOx emissions as follows;
 - i. For each hour, estimate and record the NOx emissions from the power plant based on equation in condition 8, PTO 796.
 - ii. Total the estimated emissions in excess of the permit limit of 27.2 lbs/hr, and have a running total for the duration of the variance period.
 - iii. Records shall be scanned and emailed to District inspection (jan@gbuapcd.org).

- 1 d) Within 30 days of the end of the variance period, a final report shall be submitted to the
2 District. The final report shall contain;
- 3 i. All estimated NOx reading in lb/hr for the duration of the variance period.
 - 4 ii. A total estimated NOx emissions in excess of 27.2 lbs/hr for the duration of the
5 variance period.
 - 6 iii. Identification of the outside contractors that equipment was sent to, or those brought
7 on-site for repair/servicing or replacement of existing equipment.
 - 8 iv. Identification of any new products installed in the NOx control system.
 - 9 v. Dates that deficiencies were ascertained.
 - 10 vi. Corrective actions taken by CR Briggs or the outside contractors.
 - 11 vii. Dates the equipment was re-installed at the CR Briggs facility.
 - 12 viii. An outside experts' opinion that catalyst material left in place (not replaced or
13 regenerated) has at least 1 year of effective control surface left.
 - 14 ix. A copy of the previous servicing intervals for the control equipment associated with
15 the power plant, and a new document, with preventative maintenance at shorter
16 intervals than previous preventative maintenance program.
 - 17 x. Records that the room containing the sensitive CEMS equipment is maintained at the
18 temperature range recommended by the manufacturer.
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- 21 2. District staff further recommends that the variance period start on March 27, 2011, which is
22 retroactive from the date of this hearing, and terminate on or before June 25, 2011.
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Prepared by: *Duane Ono*
Duane Ono
Deputy Air Pollution Control Officer

 March 25, 2011
Date

Attachment: PTO #796