



New Mexico Environment Department
Air Quality Bureau
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VERSION 07.21.08

20.2.7 NMAC – EXCESS EMISSIONS

INSTRUCTIONS FOR COMPLETING EXCESS EMISSIONS REPORTING (EER) FORM

PLEASE NOTE:

1. A reporting submittal form (used for routine submittals required by permits and/or regulations such as Title V Annual Compliance Certification reports and NSPS Subpart KKK semi-annual reports) is **NOT** required for submitting an EER form.
2. The electronic version of the EER form will expand automatically to accommodate text as needed.

SECTION I - GENERAL INFORMATION: (Note 1)

- A. *AI Number* – Identification number for the facility assigned by the Department database. If you do not know the AI number for your facility, contact the AQB.
- B. *Activity Number* – Identification number for the excess emission event assigned by the Department database. Not required for Initial Report or Initial/Final Report. If you do not know the activity number for an Update or a Final Report, contact the AQB.
- C. *Company Name* - Identify the owner or operator of the facility.
- D. *Facility Name* – Self explanatory.
- E. *Stationary Source* - any building, structure, equipment, facility, installation (including temporary installations), or operation which emits or may emit any air contaminant.
- F. *Portable Source* – a source which can be relocated to another operating site with limited dismantling and reassembly, including for example but not limited to moveable sand and gravel processing operations and asphalt plants.
- G. *If portable source, location of source* – Check either UTM or Lat, Long. Indicate the location in UTM coordinates (to nearest 0.1 km), or lat, long (degrees, min, sec).
- H. *TV Permit No.* – Permit number of current title V permit (i.e.; P456-R2-M1). If you do not have a Title V permit, you may leave this field blank.
- I. *NSR Permit No.* - Permit number of current state construction permit (i.e.; 9456-M1, GCP-XXX, PSD-NM- 4343).
- J. *Initial Report* – Check if you are submitting the first report for this excess emission for an ongoing event. A final report will be required after conclusion of the event. The initial report is due no later than the end of the next regular business day after the time of discovery. The end of the business day means 23:59:59.
- K. *Update Report* - Check if you are submitting (1) a report for which you have already submitted an initial report, the event is continuing, and you intend to submit additional update reports or a final report, or (2) a correction to the initial report. A final report will be required after conclusion of the event.
- L. *Initial/Final Report* – Check if you are submitting a combined initial/final report for this excess emission (i.e.; the event has already concluded, all information is available, and this is the only

report that will be submitted for the event). This report is due before the end of the next regular business day after discovery of the excess emission.

- M. *Final Report* - Check if you are submitting the final report for this excess emission (i.e.; the event has already concluded, an initial report has been submitted, all information is available, and this is the final report that will be submitted for the event). The final report is due no later than ten (10) days after the conclusion of the excess emission.
- N. *Failure Point No.* – Permit-based emission unit designation for the specific piece of equipment that failed and caused the excess emission (i.e; EU-25, ES-01, Unit No. 007). If the equipment that failed and caused the excess emission is not permitted, (i.e.; third party electrical supply, DCS system, etc.) you may leave this field blank.
- O. *Failure Point Description* – Description of the specific piece of equipment that failed and caused the excess emission (i.e.; Inlet Turbine, Baghouse, Catalytic Converter, Third Party Electrical Supply, DCS System).
- P. *Release Point No.* - Permit-based emission unit designation for the specific piece of equipment from which the excess emission was released (i.e; FL-25, ES-01, Unit No. 007).
- Q. *Release Point Description* – Description of the specific piece of equipment from which the excess emission was released (i.e.; Emergency Flare, Turbine Stack, Baghouse Stack).
- R. *Discovery Date*, S. *Discovery Time* – Date (mm/dd/yyyy) and time (hh:mm, military format) the excess emission was discovered.
- T. *Failure Date*, U. *Failure Time* – Date (mm/dd/yyyy) and time (hh:mm, military format) the excess emission event commenced.
- V. *Corrected Date*, W. *Corrected Time* – Date (mm/dd/yyyy) and time (hh:mm, military format) the excess emission event concluded.
- X. *1st Bus. Day After Disc.* – First business day after the excess emission was discovered. Business day means any day on which state government offices are open for normal business. Saturdays, Sundays, and official federal or state holidays are not business days (i.e.; if an excess emission is discovered on a Friday, Saturday or Sunday, Monday would be the first business day after discovery unless it is a holiday. If that Monday is a federal or state holiday, Tuesday would be the first business day after discovery).
- Y. *Person Reporting* - Self explanatory.
- Z. *Office Phone*, AA. *Cell Phone* – Office and cell phone numbers of person reporting.
- BB. *Email Address* – Email address of person reporting.

SECTION II. - REPORTING REQUIREMENT: (Note 2)

- A. *20.2.7 NMAC* – This box must be checked unless you are submitting a report as required by 40 CFR 63 (MACT).
- B. *20.2.70 NMAC (Title V)* – Check this box if your facility has a Title V permit, otherwise leave blank.
- C. *40 CFR 60 (NSPS)* – Check this box if you exceeded an applicable NSPS standard for an emission unit not equipped with a continuous monitoring system subject to the requirements of 40 CFR §60.7(c) (i.e., during a periodic emission test on a turbine subject to NSPS Subpart GG, the results indicate that the turbine exceeded the NO_x emission limit in ppm specified by 40 CFR §60.332(a)).
- D. *40 CFR 63 (MACT)* – Check this box if you are submitting an excess emission report as required by 40 CFR §63.6(e)(3)(iv).

SECTION III - EVENT TYPE: (Note 3)

- A. *Malfunction* – Check if the excess emission was due to malfunction (i.e., a sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. [20.2.7.7.E NMAC]).
PLEASE NOTE - A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction.
- B. *Startup* – Check if the excess emission was due to startup (i.e., the setting into operation of any air pollution control equipment or process equipment [20.2.7.7.I NMAC]).
- C. *Shutdown* – Check if the excess emission was due to shutdown (i.e., the cessation of operation of any air pollution control equipment or process equipment [20.2.7.7.H NMAC]).
- D. *Emergency* - Check if the excess emission was not due to malfunction, startup, shutdown or scheduled maintenance and was due to emergency (i.e.; any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including an act of God that caused the source to exceed a technology-based emission limitation in the permit [20.2.7.113.A NMAC]).
PLEASE NOTE – An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.
- E. *Deviation* – If you are a Title V source, you must check this box.
- F. *Scheduled Maintenance* – Check if the excess emission was due to a scheduled maintenance event.
PLEASE NOTE – There is no affirmative defense for an excess emission due to scheduled maintenance.
- G. *SS or SM notification (see instructions)?* - If the excess emission was due to routine or predictable Startup, Shutdown or Scheduled Maintenance, have you submitted a notification to the Department pursuant to 20.2.7.14 & 15 NMAC to permit these emissions? Check yes, no or NA. If the excess emission was not due to Startup, Shutdown or Scheduled Maintenance, you may leave the boxes blank.
- H. *Explain answer to G above* – If yes, indicate the date on which you submitted the notification to the Department. If no, explain why you have not submitted such notification. If NA, explain (i.e.; Startup or Shutdown was not routine or predictable). If the excess emission was not due to Startup, Shutdown or Scheduled Maintenance, you may leave blank.
PLEASE NOTE - You cannot check NA for Scheduled Maintenance which is a routine and predictable activity.
- I. *Affirmative Defense Claim* – Check if you intend to claim an affirmative defense for the excess emission. You must submit an Affirmative Defense Demonstration Form with all supporting documentation no later than thirty (30) days after the conclusion of the event. Failure to check the box or submit the form by the specified deadline shall waive the defense.
PLEASE NOTE – There is no affirmative defense under state law for an excess emission due to the following:
1. Scheduled maintenance
 2. Routine or predictable startup or shutdown
 3. Violation of a federal standard (you may be entitled to an affirmative defense under federal law for a violation of a federal standard).
- Emissions due to Scheduled Maintenance or routine or predictable Startup and Shutdown must ultimately be permitted (see 20.2.7.14 & 15 NMAC).

SECTION IV – CAUSE AND NATURE OF EVENT (Detailed Description): (Note 4)

Describe in detail the cause and the nature of the excess emission.

SECTION V – STEPS TAKEN TO LIMIT DURATION AND MAGNITUDE OF EXCESS EMISSION (Detailed Description): (Note 5)

Describe in detail the measures taken to minimize the duration and magnitude of the excess emissions.

SECTION VI - CORRECTIVE MEASURES (Detailed Description): (Note 6)

Describe in detail the corrective measures implemented to eliminate the excess emissions and to prevent a recurrence.

SECTION VII - EMISSIONS ARE IN EXCESS OF THE FOLLOWING REQUIREMENT: (Note 7)

You must enter a permit number and condition (fields A and B) or a regulatory citation and section (fields C and D). If the event that you are reporting involves more than one exceedence for a given pollutant (i.e.; exceedence of NO_x lb/hr and lb/MMBtu or exceedence of SO₂ ppm and lb/hr), you will have to use an additional form.

A. *Permit No.* – If a permit condition has been exceeded, list the number of the applicable permit; Title V (i.e.; P5678-R2-M1) or construction (i.e.; 9678-M4).

B. *Condition* – List the condition of the applicable permit that was exceeded (i.e., 3.4.3.2.2, 6.b.ii).

If a regulatory citation has been exceeded, leave fields A and B blank.

C. *Regulatory Citation* - If a regulatory (state or federal) citation has been exceeded; list the applicable regulation (i.e.; 20.2.61 NMAC, 40 CFR 60).

D. *Section* – List the specific section of the regulatory standard that was exceeded (i.e., 109.A.2, 60.333(e)(ii)(2)).

If a permit condition has been exceeded, leaved fields C and D blank.

E. *Text* - Reproduce the text from the permit condition or the regulatory citation in its entirety (i.e.; “Table 3.2 lists the emission units and their allowable limits”, “No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any fluid catalytic cracking unit catalyst regenerator any gases that contain carbon monoxide (CO) in excess of 500 ppm by volume (dry basis)”).

SECTION VIII – EXCESS EMISSION DETAILS (Note 8)**SECTION VIII.1 - DURATION OF EVENT, hh:mm:**

For each pollutant, provide the duration of the excess emission event in hours and minutes (hh:mm format). Aggregate the duration for noncontiguous periods constituting a single event.

If you are reporting an excess emission of a pollutant not listed in fields A to H, enter the pollutant name in field I (i.e.; PM10, PM2.5, individual HAPs such as formaldehyde, hexane, etc.) and provide the duration in hours and minutes (hh:mm format) in the text field below.

The example below is for formaldehyde, 25 hours 33 minutes:

I. Formaldehyde 25:33

SECTION VIII.2 – EMISSION LIMITS OR STANDARDS (indicate units):

List the value and the units from the permit or regulatory citation (i.e.; from a permit - 14.6 lb/hr, from a regulatory citation - 0.2 lb/MMBtu, 160 ppm).

SECTION VIII.3 – AVERAGING PERIOD:

Averaging time that is the basis of the emission limit (i.e.; for lb/hr, 1 hour, if the permit indicates three hour average, 3 hours, if the regulation indicates 30 day rolling average, 30 days).

If there is no apparent averaging period (i.e.; “No owner or operator ... shall discharge ... into the atmosphere from any fluid catalytic cracking unit catalyst regenerator any gases that contain carbon monoxide (CO) in excess of 500 ppm by volume (dry basis)”), leave blank.

SECTION VIII.4 - EXCESS EMISSIONS FOR EVENT, pounds (except for opacity and visible emissions):

A. *NOx*, B. *SO2*, C. *CO*, D. *PM* (total particulate), E. *VOC*, F. *H2S* – Provide the quantity of the excess emission for each pollutant in pounds, regardless whether the quantity would be more conveniently expressed in tons. For exceedences of emission limits (or standards) expressed in units of lbs/MMBtu or ppm, report the quantity in pounds. Attach detailed calculations to the report. Sample calculations are provided below.

- i. The permitted emission limit for a unit is 10 lbs/hr *NOx*, and the emissions are 15 lbs/hr for 10 hours. The quantity of excess emissions is 50 lbs (10 hours * 5 lbs/hr in excess of emission limit).
- ii. The emission standard is 0.2 lbs/MMBtu *NOx*, and the emissions are 0.3 lbs/MMBtu for 30 hours. The quantity of excess emissions is 15 lbs (30 hours * 0.1 lbs/MMBtu in excess of standard * 1000 Btu/scf fuel heating value * 5000 scf/hr fuel flow rate * 1/1E6).
- iii. The emission standard is 150 ppm *NOx* and the emissions are 300 ppm *NOx* for 50 hours. The quantity of excess emissions is 78 lbs (50 hours * 150 ppm in excess of standard * 1000 Btu/scf fuel heating value * 5000 scf/hr fuel flow rate * 1E-6 * 8710 dscf/MMBtu * 46.01 lb/lbmol *NOx* * 2.594E-9).

G. *Opacity* – Report the average opacity (%) for the duration of the excess emission. Attach a copy of the EPA Method 9 opacity form or the COMS printout to the EER.

H. *Visible Emissions* - Indicate Yes or No. Attach a copy of the EPA Method 22 visible emissions form to the EER.

I. *Other (specify)* – If you are reporting an excess emission of a pollutant not listed in fields A to H, enter the pollutant name in field I (i.e.; PM10, PM2.5, individual HAPs such as formaldehyde, hexane, etc.) and provide the quantity in pounds in the text field below.

The example below is for formaldehyde, 257 pounds:

I. Formaldehyde 257

SECTION VIII.5 – NUMBER OF EXCEEDENCES OF EMISSION LIMIT OR STANDARD:

The number of exceedences of the emission limit over the duration of the excess emission. This will usually be calculated by dividing the duration of the excess emission in hours by the averaging period (i.e.; If a permit limit based on a lb/hr hour average is exceeded for 96 hours, the number of exceedences would be 96/1 = 96).

PLEASE NOTE - If the emission limit is based on a rolling average, the calculation method described above is not applicable. In this case, the determination of the number of exceedences will require a different method (i.e.; analysis of CEM or other data).

SECTION VIII.6 – AVERAGE EMISSION RATE FOR AVERAGING PERIOD (indicate units):

The average emission rate over the duration of the excess emission, based on the averaging period. This will usually be calculated by dividing the total emissions for the event by the number of exceedences. This is illustrated in the examples below:

- A. Emission limit is 27.6 lbs/hr. Emission limit was exceeded for 48 hours and total emissions for the period were 2086 lbs. Average emission rate for the duration of the event is $2086/48 = 43.46$ lbs/hr.
- B. Emission limit is 95.0 lbs/hr, based on a 3 hour rolling average. The emission limit was exceeded for nine consecutive rolling average periods with the following readings: 97.7, 97.5, 97.4, 97.5, 97.7, 97.6, 97.3, 96.8 and 96.0. The total emissions are the sum of the nine periods or 875.5. The average emission rate for the nine consecutive rolling average periods is $875.5/9 = 96.9$ lbs/hr based on a 3 hour rolling average.

SECTION IX - BASIS OF ESTIMATE (check all that apply, attach supporting data): (Note 9)

Provide all supporting data for the basis (or bases) of estimate utilized to determine the information required by Section VIII.

- A. *Compliance Test* - Check if compliance test data was used.
- B. *Continuous Monitor* - Check if continuous monitor (CEM, COM, or other) data was used.
- C. *Calculation* - Check if data from a permit application, mass balance, AP-42, or other theoretical basis was used.
- D. *Operating Log(s)* - Check if plant operating log data was used.
- E. *Other* - Check if data from a source other than those listed in fields A – D was used.
- F. *If other, explain* - If you checked item E, enter the method used in field I.

The example below is for GRI Gly-Calc.:

E. Gly-Calc v 4.0

SECTION X - CERTIFICATION: (Note 10)

The final report must be signed by the company representative submitting the report. This signature constitutes a certification of the truth, accuracy and completeness of the contents of the report and all supporting documentation.