The Environmental Impact Analysis (NEPA) Process

For the most part, many of the small activities occurring on federal lands such as livestock grazing, road maintenance, small sand and gravel plants and such are not significant sources of air pollution. The Clean Air Act, however, has specific requirements in relation to approving activities on federal lands. The Federal EPA issued final rules in November 1993 to implement the law. These rules are under the title of "Determining Conformity of General Federal Actions to State or Federal Implementation Plans" and are found in 40CFR Part 93.

Rules under 40 CFR part 93.850 (Prohibitions) establish the that:

- "(a) No department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan."
- "(b) A Federal agency must make a determination that a Federal action conforms to the applicable implementation plan in accordance with the requirements of this section before the action is taken."

As one can see from (a) and (b) above, there isn't much that is much that is exempt, and some sort of determination is necessary. That being said, there is no reason that the process needs to be complicated. The CFR talks about documenting the determination and in several cases I know of, the documentation was looked for, by the court, in the NEPA document. One of the following formats should meet the requirements for the NEPA document:

A. The following is for livestock grazing

Relationship to Statutes, Regulations, and Agency Jurisdiction

The (INSERT THE AIR DISTRICT OR STATE AGENCY NAME HERE) has state air quality jurisdiction over the project area.

(Add the following text if there is a Federal nonattainment/maintenance area involved)

Section 176 (c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 *et seq.*) and regulations under 40 CFR part 93 subpart W, with respect to the conformity of general Federal actions to the applicable State Implementation Plan (SIP) apply to projects within nonattainment and maintenance areas. Under those authorities "no department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan." Under CAA 176 (c) and 40 CFR part 93 subpart W, a Federal agency must make a determination that a Federal action conforms to the applicable implementation plan before the action is taken.

40 CFR Part 93.153 Applicability

(c) The requirements of this subpart shall not apply to the following Federal actions:
(iii) Continuing and recurring activities such as permit renewals where activities will be similar in scope and operation to activities currently being conducted.

Affected Environment

(The following text to be used for Federal nonattainment/maintenance areas)

Air quality throughout the project area is good much of the time. There are, however, times that the area has not meet air quality standards due to locally generated and/or transported in pollutants. This has resulted in the current classification of the area as (a) federal nonattainment/maintenance area(s) for (INSERT THE CRITERIA POLLUTANT NAME HERE ozone, PM-10, carbon monoxide, etc.) under the National Ambient Air Quality Standards. The project area is within the (INSERT THE EPA PLANNING AREA NAME HERE) Planning Area. A State Implementation Plan (SIP) has been prepared for the planning area which identifies sources of emissions and control measures to reduce emissions. Federal actions are subject to conformity determinations under 40 CFR 93.

(The following text to be used for areas outside Federal nonattainment/maintenance areas)

Air quality throughout the project area is good much of the time. The site has not been classified as a Federal nonattainment/maintenance area by the EPA. Federal actions are not subject to conformity determinations under 40 CFR 93. The (INSERT THE AIR DISTRICT OR STATE AGENCY NAME HERE) has air quality jurisdiction over the project area. The (INSERT THE AIR DISTRICT OR STATE AGENCY NAME HERE) has rules concerning fugitive dust emissions.

Anticipated Direct and Indirect Impacts of Proposed Action

Fugitive dust emissions could occur due to the soil disturbance as a result of the trampling action of the livestock when soil moisture levels are low. Support vehicle use on the access roads will generate small amounts of PM-10 emissions throughout the grazing area and could carry soils onto the paved roads which would increase entrainment PM-10 emissions. The support vehicles emit various precursor emissions for ozone. Actual emissions amounts from this grazing activity are negligible. No significant offsite impacts are anticipated.

(Add the following text if there is a Federal nonattainment/maintenance area involved)

The proposed project does not exceed the *de minimis* emission levels and is therefore exempt from conformity determination (40 CFR Part 93.153 (iii)) as a continuing and recurring activity (such as permit renewals) where activities will be similar in scope and operation to activities currently being conducted. As a result no formal conformity analysis or determination is required.

Irreversible and irretrievable commitment of resources

No irreversible or irretrievable commitment of air resources would result.

Recommended mitigation measures

No mitigation measures are recommended.

Residual Impacts

Residual impacts to air quality include an increase in dust emissions from vehicle activity and grazing operations, and hydrocarbon and combustion emissions from internal combustion engines during the grazing operations. No long-term residual adverse impacts to air quality are expected from the proposed action. The impacts are expected to occur during the duration of the proposed grazing season. Once the season is completed the site should return to pre-grazing emission levels.

Cumulative Impacts

The air quality cumulative impact area for the proposed action is the (INSERT THE EPA PLANNING AREA NAME HERE) Planning Area.

(Add the following text if there is a Federal nonattainment/maintenance area involved)

This area also includes the (INSERT THE FEDERAL NONATTAINMENT/ MAINTENANCE AREA NAME HERE, e.g. Owens Valley-Inyo County PM-10) nonattainment/maintenance area). The expected emission levels are within the attainment demonstrations included the SIP, and the cumulative air quality impacts are not anticipated to result in, or contribute to, exceedances of the National Ambient Air Quality Standards.

(Add the following text if no Federal nonattainment/maintenance area is involved)

This area also includes the (INSERT THE AIR BASIN NAME HERE, e.g. Carmel Valley) air basin. The expected emission levels are not anticipated to result in, or contribute to, exceedances of the National Ambient Air Quality Standards.

Recommended mitigation measures

None

THIS SECTION NEEDS TO BE INCLUDED IN THE RECORD OF DECISION FOR ACTIVITIES WITHIN FEDERAL NONATTAINMENT/MAINTENANCE AREAS

The proposed action and alternatives have been analyzed under section 176 (c) of the Clean Air Act (CAA), as amended, and the selected action has been determined to conform with the applicable State Implementation Plan (SIP) requirements for attaining applicable ambient air quality standards (NAAQS).

B. The following is for other general actions

Relationship to Statutes, Regulations, and Agency Jurisdiction

(Air Quality Text Examples)

(San Bernardino County)

The Mojave Desert Air Quality Management District (MDAQMD) has state air quality jurisdiction over the project area. The MDAQMD has issued a set of rules to implement the State Implementation Plan (SIP) (Rule 403.1 11/25/96) which apply to the proposed action. The MDAQMD also has additional rules under 401, 402 and 403 that apply to this project along with permitting requirements.

(Kern County)

The Kern County Air Pollution Control District (KCAPCD) has state air quality jurisdiction over the project area. The KCAPCD has rules which include the need for permits for stationary sources such as engines, screening plants and such, and fugitive dust emissions. The fugitive dust rule (Rule 401 - Visible Emissions) states that a person shall not cause or allow emissions of fugitive dust from any active operation to remain visible in the atmosphere beyond the property line of the emission source. Kern County APCD also adopted Rule 402 - Fugitive Dust to implement the SIP. Rule 402 includes specific dust control measures to limit man-caused PM-10 emissions from construction, demolition, earth moving, bulk material storage and vehicle travel on unpaved roads. Rules include the requirement of Reasonably Achievable Control Measures (RACM) and other measures depending upon the size of the operation.

(Within nonattainment areas)

Section 176 (c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 *et seq*) and regulations under 40 CFR part 93 subpart W, with respect to the conformity of general Federal actions to the applicable implementation plan (SIP) apply to projects within nonattainment areas. Under those authorities, "no department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan". Under CAA 176 (c) and 40 CFR part 93 subpart W, a Federal agency must make a determination that a Federal action conforms to the applicable implementation plan before the action is taken.

(Example conformity exemptions)

40 CFR Part 93.153 Applicability

(c) The requirements of this subpart shall not apply to the following Federal actions:

(iii) Continuing and recurring activities such as permit renewals where activities will be similar in scope and operation to activities currently being conducted.

Affected Environment

(The following text to be used for Federal nonattainment/maintenance areas)

Air quality throughout the project area is good much of the time. There are, however, times that the area has not meet air quality standards due to locally generated and/or transported in pollutants. This has resulted in the current classification of the area as (a) federal nonattainment/maintenance area(s) for (INSERT THE CRITERIA POLLUTANT NAME HERE ozone, PM-10, carbon monoxide, etc.) under the National Ambient Air Quality Standards. The project area is within the (INSERT THE EPA PLANNING AREA NAME HERE) Planning Area. A State Implementation Plan (SIP) has been prepared for the planning area which identifies sources of emissions and control measures to reduce emissions. Federal actions are subject to conformity determinations under 40 CFR 93.

(The following text to be used for areas outside Federal nonattainment/maintenance areas)

Air quality throughout the project area is good much of the time. The site has not been classified as a Federal nonattainment/maintenance area by the EPA. Federal actions are not subject to conformity determinations under 40 CFR 93. The (INSERT THE AIR DISTRICT OR STATE AGENCY NAME HERE) has air quality jurisdiction over the project area. The (INSERT THE AIR DISTRICT OR STATE AGENCY NAME HERE) has rules concerning fugitive dust emissions.

Anticipated Direct and Indirect Impacts of Proposed Action

(Air Quality Text Examples)

An increase in fugitive dust during wind storms could occur due to the soil disturbance as a result of the proposed action. Vehicle use on the access road will generate PM-10 emissions throughout the project area and could carry soils onto the paved Oak Creek Road which would increase entrainment emissions. Emissions from the proposed action will be minimal. No significant offsite impacts are anticipated. Control measures are included to reduce fugitive dust emissions from the proposed project. The proposed project does not exceed the *de minimis* emission levels and no formal conformity determination is necessary.

OR

Emissions from the proposed action will be minimal. No significant offsite impacts are anticipated. Control measures are not included and are not necessary to reduce emissions from the proposed project. The proposed project does not exceed the *de minimis* emission levels and no formal conformity determination is necessary.

<u>OR</u>

The operation of the crusher, screens, generator, dryer, conveyer belts and other stationary sources require a permit from the (INSERT THE AIR DISTRICT OR STATE AGENCY NAME HERE). The absence of Reasonably Achievable Control Measures (RACM) and air quality permits does not conform to the SIP and therefore **no Federal authorization can be issued**.

OR

The mining and processing operations will generate PM-10 emissions as follows: The use of engines to power the operation will generate unknown levels of particulate and other emissions. Control measures are incorporated into the proposed action to reduce emissions from many of the activities associated with the proposed project (see table). The project as proposed with the specified emission control does not exceed the *de minimis* emission levels and conforms to most of the SIP provisions. The operation of the crusher, screens, generator, conveyer belts and other stationary sources require a permit from Mojave Desert Air Quality Management District. The absence of air quality permits does not conform to the SIP and therefor **no federal authorization can be issued until the necessary air quality permits are acquired**. No further conformity analysis is necessary.

Expected PM-10 Emissions using USEPA AP-42 8.3, 8.7 & 11.2							
Source	Size	Units	Emission Factor	PM-10 Factor	Uncontrolled Emissions (lbs)	Control rate	Controlled Emissions (lbs)
Crushing/Screening Plant Per Year Per Day	26,000 300	Ton	76 lb/ton	51%	1,007,760 11,628	95%	50,388 2,907
Stockpiles/Storage Per year Per day	26,000 300	Ton	34 lb/ton	51%	450,840 5,202	95%	22,542 1,301
Stripping/Mining	3	Acres	2400 lbs/acre- month	51%	44,064	50%	22,032
Bare Ground	3	Acres	620 lbs/acre	100%	1,860	80%	744
Access Road Entrainment Per Year loaded unloaded Per day loaded unloaded	714.78 714.78 8 8	VMT	45.95 ² lbs/VMT 35.76 ³ lbs/VMT	36%	11,824 9,201 132 103	95%	591 460 7 5
Annual totals (lbs & tons) at full production					1,481,485 lbs 740.7 tons		96,757 lbs 48 tons
Maximum daily totals (lbs & tons) at full production					17,191 lbs 8.59 tons		4,282 lbs 2.14 ton

Conformity de minimis emission level for PM-10 is 100 tons per year.

Notes: (1) Vehicle Miles Traveled based on 26,000 tons per year / 24 tons per load times 0.66 miles of road.

(2)/(3) Emission factor (loaded)/(empty) based upon following: silt content=15%, vehicle speed=15mph, mean vehicle weight=40(loaded)/28(empty) tons, number of wheels=18, and number of days with measurable rain=15

Source	Emission controls incorporated into project		
Crushing/Screening Plant	Covered process line & cyclone separator with water scrubber		
Stockpiles/Storage	Water spray to form crust May use chemicals as necessary		
Stripping/Mining	Water spray		
Bare Ground	Water spray to form crust May use chemicals as necessary		
Access Road Entrainment	speed limit 15 MPH, chemical coating and cleaning		

Irreversible and irretrievable commitment of resources

No irreversible or irretrievable commitment of air resources would result.

Recommended mitigation measures

1. Continue to following applicable state and Federal guidelines (i.e. Reasonably Available Control Measures, or RACM) to control PM-10 emissions from unpaved roads, open storage piles and disturbed surface areas. These are required in the SIP and (INSERT THE AIR DISTRICT OR STATE AGENCY NAME HERE) Rules, including:

Source category Control Measure

Unpaved road Improve road surface

Control vehicular traffic speed (20 MPH)

Apply dust suppressants

Open storage piles Use wind screens

(only if silt content Use enclosures around piles is 5 or more percent) Apply dust suppressants

Vegetate

Apply dust suppressants

Cover with gravel Compact surface

- 2. Keep the APCD permits current.
- 3. If the vehicles ultimately carry material onto paved roads, then the road would need to be swept clear to reduce entrainment dust.
- 4. Use water as necessary to limit fugitive dust blowing off the site during the work if fugitive emissions exceed (*INSERT THE AIR DISTRICT OR STATE AGENCY NAME HERE*) requirements.
- 5. Curtail activities when wind speeds exceed 25 MPH.

Residual Impacts

Residual impacts to air quality include an increase in dust emissions from vehicle activity and drilling operations and hydrocarbon and combustion emissions from internal combustion engines during the life of these operations. No long-term residual adverse

effects on air quality are expected from the proposed action. The impacts are expected to occur during the duration of the proposed action. Once the action is completed the site should return to pre-disturbance emission levels.

Cumulative Impacts

The air quality cumulative impact area for the proposed action is the (INSERT THE EPA PLANNING AREA NAME HERE) Planning Area.

(Add the following text if there is a Federal nonattainment/maintenance area involved)

This area also includes the (INSERT THE FEDERAL NONATTAINMENT/ MAINTENANCE AREA NAME HERE, e.g. Owens Valley-Inyo County PM-10) nonattainment/maintenance area). The expected emission levels are within the attainment demonstrations included the SIP, and the cumulative air quality impacts are not anticipated to result in, or contribute to, exceedances of the National Ambient Air Quality Standards.

(Add the following text if no Federal nonattainment/maintenance area is involved)

This area also includes the (INSERT THE AIR BASIN NAME HERE, e.g. Carmel Valley) air basin. The expected emission levels are not anticipated to result in, or contribute to, exceedances of the National Ambient Air Quality Standards.

THIS SECTION NEEDS TO BE INCLUDED IN THE RECORD OF DECISION FOR ACTIVITIES WITHIN FEDERAL NONATTAINMENT/MAINTENANCE AREAS

The proposed action and alternatives have been analyzed under section 176 (c) of the Clean Air Act (CAA), as amended, and the selected action has been determined to conform with the applicable State Implementation Plan (SIP) requirements for attaining applicable ambient air quality standards (NAAQS).