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November 3, 2015

Ms. Diane G. Kindermann Henderson
Abbott & Kindermann, LLP
2100 21st Street
Sacramento, CA 95818

Subject: Technical Report of Findings Related to Hazardous Materials and Off-site Truck Transport of Hot Mix Asphalt (HMA)

Dear Ms. Kindermann Henderson:

Enclosed is a Technical Report of our findings related to hazardous materials, emissions analyses, and off-site truck transportation of petroleum asphalt and/or hot mix asphalt ("HMA")[1]. This summary was prepared by Yorke Engineering, LLC on behalf of Abbott & Kindermann, LLP and the C.B. Asphalt, Inc. ("CB Asphalt").

CB Asphalt has plans to install a HMA plant at the Hogan Quarry, an existing aggregate processing facility located at 3650 Hogan Dam Road, Valley Springs, California. When operational, the HMA plant will include equipment typical of a HMA manufacturing facility such as asphalt storage tank(s), mixers, blenders, conveyors and load-out equipment. The necessary aggregate materials to make the HMA will be provided from on-site sources. The necessary liquid and asphalt additives will be transported to the plant with trucks. Finished HMA will be delivered to various job sites and customers via asphalt hauling trucks.

The purpose of this analysis is to respond to a request by Calaveras County for additional information related to hazardous material transportation associated with off-site truck transport of asphalt to and from the CB Asphalt facility. In its correspondence dated August 24, 2015, the County requested the following information:

[1] Petroleum asphalt is a petroleum product that acts as the binder for HMA. HMA is a mixture of petroleum asphalt, sand, aggregate, and various additives. The term "asphalt" is used in this document to mean either petroleum asphalt or HMA.

- Estimate fugitive asphalt emissions during transport.
- Estimate long-term mobile source emissions. Emissions estimates should be provided in pounds per day (lbs/day) and tons per year (tons/yr).

Emission estimates are provided in this report along with the relevant regulatory context for those emissions. In addition, the County made statements related to the characterization of asphalt as a hazardous material that are inconsistent with our experience; we briefly discuss regulatory citations relevant to hazardous material determinations. Finally, we discuss CB Asphalt's ability to comply with the Calaveras County Air Pollution Control District ("CCAPCD") stationary source regulations.

SUMMARY CONCLUSIONS

Based on our evaluation, Yorke offers the following conclusions:

- Asphalt is not regulated as a hazardous material under most state or federal regulatory programs, although the County Code appears to include a broad definition of hazardous materials for planning and zoning evaluation purposes. While it may be considered an irritant by the Occupational Safety and Health Administration ("OSHA") and may be transported at an elevated temperature, it does not have the potential to cause significant adverse environmental impacts.
- Based on the infrequent exposure to the transport trucks, the brief duration of the exposure to asphalt fumes, and the expected dilution of the fumes due to the speed of the trucks on the roadways and the distance from the roadways to receptor locations, the impact of odors during transport of asphalt to and from the facility are expected to be less than significant.
- Asphalt transportation vehicles are expected to have tailpipe emissions from fuel combustion, particulate matter (PM10, PM2.5) emissions from entrained road dust, brake and tire wear, and volatile organic compound ("VOC") emissions from evaporation of fuels from the fuel tanks. At

the proposed operating level of two (2) additional truck trips per day within the County over the baseline facility operations, the transportation emissions from the proposed Project are negligible, and well below the significance thresholds established by the air districts in the state.

- Emissions of VOC from asphalt in the tank trucks during transportation are negligible due to the extremely low vapor pressure of asphalt, even when heated. Hydrogen sulfide, known to cause adverse health effect in sufficiently high concentrations, may be present in trace quantities in asphalt. Even if all of the hydrogen sulfide present in asphalt were release instantaneously (a very unlikely scenario), the emissions still would not pose a health risk to any exposed persons. Actual emissions of hydrogen sulfide are not known and may approach zero under conditions of transport.

The remainder of this Technical Report is organized as follows:

A. Approach

B. Fugitive Asphalt Emissions during Transport

C. Long-term Mobile Source Emissions

D. Hazardous Material Determination

E. Other Regulatory Considerations

F. Conclusions

A. APPROACH

Calaveras County has not published significance thresholds for determining if a proposed project has the potential for significant adverse environmental impacts. Yorke therefore relied on the significance thresholds published by other air quality agencies in California, namely the San Joaquin Valley Air

Pollution Control District ("SJVAPCD") because we understand that CCAPCD also relied on the SJVAPCD criteria and thresholds in its Authority to Construct ("ATC") Permit evaluation (Attachment C), the South Coast Air Quality Management District ("SCAQMD"), because the SCAQMD has the most thoroughly vetted air program in the state, and to a lesser extent, we relied on the Bay Area Air Quality Management District ("BAAQMD") guidelines.

B. FUGITIVE ASPHALT EMISSIONS DURING TRANSPORT

Emissions Estimation

Asphalt is known to contain trace levels[2] of hydrogen sulfide. To understand the relative quantity of hydrogen sulfide potentially present in a tank truck, a 5,000 gallon load of petroleum asphalt with a hydrogen sulfide concentration of 1 part per million by weight (ppmw) would contain approximately 0.04 pounds of hydrogen sulfide. For 625 trucks annually, the total hydrogen sulfide present would be 24.8 pounds. HMA, which contains only 5 to 10% petroleum asphalt by weight, would have substantially less hydrogen sulfide than the raw petroleum asphalt. Note that the estimate of 0.04 pounds per truck and 24.8 pounds per year are not emission estimates – this is the total quantity of hydrogen sulfide estimated to be present in the asphalt. Hydrogen sulfide emissions during any given time period would be a small fraction of the total quantity present in the asphalt, and may approach zero.

Asphalt has an extremely low vapor pressure, even when heated, so the VOC emissions during transport are expected to be negligible.

[2] Yorke reviewed approximately 20 MSDS available over the internet; the concentration of hydrogen sulfide was listed as "trace" or hydrogen sulfide was not listed as an ingredient. The hydrogen sulfide concentration was not quantified on any of the MSDS reviewed.

Regulatory Analysis

During review of an air permit application, CCAPCD would not normally conduct a regulatory analysis of the emissions from the heavy-duty trucks associated with the HMA plant operation, as mobile source emissions are not within air district jurisdiction[3].

CCAPCD or the County Planning Department could evaluate the heavy-duty truck emissions as a California Environmental Quality Act ("CEQA") lead or responsible agency. CCAPCD has not published CEQA guidelines for evaluating mobile source emissions; however, we understand that CCAPCD often relies on the SJVAPCD CEQA thresholds when evaluating projects, such as the ATC Permit evaluation completed for this proposed HMA plant (Attachment C).

SJVAPCD uses a risk-based approach for evaluating emissions of toxic air contaminants ("TAC"). A cancer risk exceeding 10 per million, a chronic hazard index exceeding 1.0, or an acute hazard index exceeding 1.0 would be significant adverse impacts.

It is possible to estimate health risk impacts from a mobile source travelling down a highway using a sophisticated dispersion modeling. However, if we assume that all of the hydrogen sulfide potentially present in the asphalt is released instantaneously (e.g., a spill resulting from a transportation accident), we can simplify the analysis considerably because we will have a defined emission quantity, and we can assume worst-case conditions with respect to the distance to a single receptor.

The SJVAPCD does not publish screening emission levels for TAC, so instead, Yorke referred to the screening emission levels for hydrogen sulfide that are published by the SCAQMD and the BAAQMD. Both of these air districts use the same criteria as the SJVAPCD for determining a significant impact (i.e.,

[3] California Health and Safety Code §40000: "The Legislature finds and declares that local and regional authorities have the primary responsibility for control of air pollution from all sources, other than emissions from motor vehicles. The control of emissions from motor vehicles, except as otherwise provided in this division, shall be the responsibility of the state board."

a cancer risk exceeding 10 per million, a chronic hazard index exceeding 1.0, or an acute hazard index exceeding 1.0). The screening emission levels are used by the air districts to determine whether or not a project would cause an unreasonable health impact. The screening emission levels are very conservative, i.e., tend to over-estimate risk, rather than underestimate risk. The screening emission levels are shown in Table 1.

Table 1: Screening Emission Levels for Hydrogen Sulfide

Air District	Emissions		Reference
	(lb/hr)	(lb/yr)	
SCAQMD	0.048	382	SCAQMD Risk Assessment Procedures for Rules 1401 and 212, Appendix M, for rector distance of 25 meters
BAAQMD	0.093	390	BAAQMD Regulation 2, Rule 5, Table 2-5-1

The total quantity of hydrogen sulfide in a single truck is less than the screening threshold for either air district. So even if there was an unplanned release of a full truckload of petroleum asphalt within 25 meters of a receptor (house, school, etc.), and 100% of the hydrogen sulfide present in the asphalt was emitted during a single hour, the emissions still would not cause a significant adverse health impact.

Please note that vehicular accidents involving the release of hazardous materials in transportation are infrequent. In a study published by the Battelle Institute, the accident frequency for trucks involved in the transportation of hazardous materials is reported to be 4.96414E-07 accidents/mile, and the frequency of a release of hazardous materials during an accident 30.91%[4]. Based on these values, and project transportation requirements of 2 trucks per day, 310 days per year, and a one-way distance traveled while loaded with petroleum asphalt of 30 miles, the probability of any accident is 0.018466 accidents per year,

[4] Battelle Institute, "Comparative Risks of Hazardous Materials and Non-Hazardous Materials Truck Shipment Accidents/Incidents", March 2001, pgs. 4-1 and 4-13.

or 1 accident every 54 years. An accident involving a release of hazardous materials from the operation of the project would have a probability of occurring once every 175 years.

In its letter to CB Asphalt (July 2, 2015), Calaveras County indicated that asphalt was a hazardous material because of the potential build-up of hydrogen sulfide in the headspace of the tank (among other reasons, which are discussed further in Section D). A build-up of hydrogen sulfide in the headspace of the tank is possible. The truck driver and facility workers would be aware of this possibility and would be trained to safely handle the asphalt and any off gasses. Thus while contained in the tank, exposure to, and environmental harm from the hydrogen sulfide is minimal. If the build-up of hydrogen sulfide were to be released, as analyzed above regarding instantaneous release from an accident, the potential for harm is less than significant.

Based on health risk criteria, emissions of VOC or hydrogen sulfide from asphalt during transportation would not have a significant adverse environmental impact.

Odors During Transport

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word strong to describe the intensity of an odor. Odor intensity depends on the concentration in the air. When an odor sample is progressively diluted, the odor concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odor reaches a level that is no longer detectable.

The presence of an odor impact is dependent on a number of variables including:

1. Nature of the odor source;
2. Frequency of odor generation;
3. Intensity of odor (concentration);
4. Distance of odor source to sensitive receptors;
5. Wind direction (e.g., upwind or downwind); and
6. Sensitivity of the receptor.[5]

Detection of chemical odors may raise health concerns due to the awareness of exposure to chemicals. However, while odor itself is a signal of some type of exposure, it does not necessarily indicate a potential health risk.[6]

[5] BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans, December, 1999.
[6] Environmental Protection Agency, Reference Guide to Odor Thresholds for Hazardous Air Pollutants Listed in the Clean Air Act Amendments of 1990, Document EPA/600/R-92/047, March 1992, pg 1-21.

Regulatory Requirements

Calaveras County APCD does not have a rule that specifically addresses odors. Odor complaints are addressed through its' nuisance rule, Rule 205. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine if potential odors would have a significant adverse impact. Rather, projects must be assessed on a case-by-case basis.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc., warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas. Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact. [7]

Discussion

Asphalt is used for paving roads, parking lots and roofing. It consists of gravel, sand, and stone that is bound together by a petroleum asphalt, a cement-like substance derived from crude oil. The ingredients used to make asphalt are mixed at high temperatures and kept heated until the asphalt is applied to a surface. Asphalt fumes are generated during the heating of the mixture and may be emitted during transport of the asphalt to the job site.

The chemical composition of asphalt varies depending on the source of the crude oil, the type of asphalt being made, and the processes used to make it. In general, asphalt fumes are a mixture of several different types of compounds. These include:

[7] San Joaquin Valley Unified Air Pollution Control District, Guidance for Assessing and Mitigating Air Quality Impacts, March 19, 2015.

- Volatile organic compounds (VOCs)
- Polycyclic aromatic hydrocarbons (PAHs)
- Particulates
- Sulfur
- Nitrogen oxides
- Carbon monoxide

Many of these chemicals are also emitted by other sources including motor vehicles, fireplaces, woodstoves and industries. All of these chemicals are normally present at low levels in outdoor air. Elevated levels may be found in the immediate vicinity of an operating asphalt plant or a paving project.[8]

The proposed Project would require shipment of two truckloads of petroleum asphalt to the facility each day, and shipment of approximately 20 truckloads of HMA from the facility each day. Odorous asphalt fumes would be emitted from these transport vehicles.

Upon leaving the facility, the haul would first be traveling down an arterial road that runs past homes at the posted speed limit of 35 miles per hour. The trucks would then transition to the highway and would travel at highway speeds, i.e., 55 or 65 miles per hour. Traveling at these elevated speeds ensures two things: 1) that the exposure duration for any single stationary receptor (e.g., house, business) to the odorous fumes is minimal (a few seconds), and that there will be ample dilution of the fumes due to the movement of the vehicle at speed. Any places that would tend to attract groups of people such as a park, school or business would be setback from the roadway, ensuring additional dilution. In addition, because the trucks are heavy duty vehicles, travel down residential streets would be limited to specific paving projects, and not part of the normal commute route to and from the facility.

[8] New Hampshire Department of Environmental Services, Environmental Fact Sheet "Road Paving Asphalt", Document ARD-45, 2011.

Based on the infrequent exposure to the transport trucks (i.e., less than 3 per hour, on average), the brief duration of the exposure to asphalt fumes, and the expected dilution of the fumes due to the speed of the trucks and the distance from the roadways to receptor locations, the impact of odors during transport of asphalt to and from the facility are expected to be less than significant.

C. LONG-TERM MOBILE SOURCE EMISSIONS

Emissions Estimation

The facility is an existing, operating aggregate plant. The addition of the HMA operations to the facility will require the shipment of the petroleum asphalt to the facility, estimated to be 2 trucks per day, 625 trucks per year. The number of outgoing trucks is not expected to change as a result of the HMA operation, since the delivery of HMA is not expected to increase truck traffic beyond what is already baseline activity at the facility. (HMA consists of only about 5 to 10% petroleum asphalt; the remainder is sand, aggregate and other additives.)

Emissions for the trucks are based on emission factors taken from EMFAC, a California Air Resources Board web-based tool[9]. Each of the 2 trucks is assumed to travel 60 miles (round trip) daily within Calaveras County. EMFAC provides emission factors for all modes of truck operation: tailpipe emissions of nitrogen oxides (NOx), sulfur oxides (SOx), carbon monoxide (CO), VOC, PM10, and carbon dioxide (CO_2), evaporative losses of fuel (VOC) and PM10 from tire and brake wear. In addition, the operation of truck on a paved road would cause particulate emissions from entrained road dust. Entrained road dust emissions are predicted based on the method described in EPA AP-42, Chapter 13.2.1, Paved Roads. Predicted emissions are shown in Table 2. The emission calculations are provided in Attachment A.

[9] http://www.arb.ca.gov/emfac/2014/

Table 2: Summary of Asphalt Trucking Emissions

Pollutant	Emissions	
	(lb/day)	(ton/yr)
VOC	0.10	0.01
CO	0.34	0.05
NOx	2.47	0.38
CO_2	454.32	70.42
PM10	1.98	0.31
PM2.5	0.52	0.08
SOx	0.004	0.001

Regulatory Analysis

Calaveras County Air Pollution Control District (CCAPCD)

As noted earlier, CCAPCD would not normally conduct a regulatory analysis of the emissions from the heavy-duty trucks associated with the HMA plant operation, as mobile source emissions are not within air district jurisdiction. CCAPCD or the County Planning Department could evaluate the heavy-duty truck emissions as a CEQA lead or responsible agency. CCAPCD has not published CEQA guidelines for evaluating mobile source emissions; however, we understand that CCAPCD often relies on the SJVAPCD CEQA thresholds when evaluating projects.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

The Project emissions are compared to the SJVAPCD CEQA mass-based significance thresholds in Table 3. As shown, based on these criteria, the project is less than significant.

Table 3: Comparison of Asphalt Trucking Emissions to SJVAPCD CEQA Significance Thresholds

Pollutant	Emissions (ton/yr)	Significance Threshold (ton/yr)	Significant? (Yes/No)
VOC	0.01	10	No
CO	0.05	100	No
NOx	0.38	10	No
PM10	0.31	15	No
PM2.5	0.08	15	No
SOx	0.001	27	No

South Coast Air Quality Management District (SCAQMD)

While CCAPCD has traditionally used SJVAPCD CEQA significance thresholds for evaluating projects, it is not obligated to under CEQA – it has discretionary authority to establish the thresholds[10].

For comparison purposes, the proposed Project is compared to the SCAQMD CEQA significance thresholds. The SCAQMD has some of the worst air quality in the nation due to unique geographic conditions, a large population and significant industrial base. Accordingly, the SCAQMD's CEQA significance thresholds are amongst the most conservative in the state. The project emissions are compared to the SCAQMD daily mass-based significance thresholds in Table 4.

[10] California Code of Regulations § 15064.7(c): "When adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

Table 4: Comparison of Asphalt Trucking Emissions to SCAQMD CEQA Significance Thresholds

Pollutant	Emissions (lbs/day)	Significance Threshold (lbs/day)	Significant? (Yes/No)
ROG	0.10	55	No
CO	0.34	550	No
NOx	2.47	55	No
PM10	1.98	150	No
PM2.5	0.52	55	No
SOx	0.004	150	No

The SCAQMD also provides a CEQA significance threshold for GHG: 10,000 metric tons (MT) per year as CO_2 equivalents (CO2e). As shown in Table 2, the project CO_2 emissions are approximately 70 (short) tons per year (≈ 64 MT per year), well below the SCAQMD significance threshold for this parameter.

D. HAZARDOUS MATERIAL DETERMINATION

In its letter to CB Asphalt (July 2, 2015), Calaveras County indicated that asphalt was a hazardous material because it was an irritant under OSHA regulations, because it was hot (i.e., temperature), and because of the potential build-up of hydrogen sulfide in the headspace of the tank. We are not disputing the County's conclusion that asphalt is a hazardous material for its own purposes, as the County appears to use a broad definition under its County Code for planning and zoning evaluation. However, in Yorke's experience, neither temperature nor classification as an irritant is commonly used to evaluate hazardous materials for the purpose of determining if the hazardous material has the potential to cause a "significant effect on the environment".

We note that Calaveras County has not published guidelines with respect to what constitutes a hazardous material and has not provided guidance with respect to the types of hazards or the quantity of materials that could cause a significant effect on the environment; however, there are a number of state agencies

that have published hazardous material lists and minimum threshold quantities above which a material should be evaluated for environmental impacts; these are discussed below.

California Accidental Release Prevention (CalARP) Risk Management Plan

The California Accidental Release Prevention ("CalARP") Program (California Code of Regulations [CCR], Title 19, Division 2, Chapter 4.5) provides the list of hazardous materials normally consulted when evaluating projects for the potential for environmental harm under CEQA. Asphalt is not on the CalARP list of hazardous materials. As discussed above, asphalt may contain trace quantities of hydrogen sulfide and the total quantity of hydrogen sulfide per truckload is not expected to exceed 0.04 pounds. Hydrogen sulfide is on the CalARP list with a threshold of 500 pounds. As such, we conclude that storage and transport of asphalt would not trigger the need for further analyses using the CalARP criteria.

South Coast Air Quality Management District

The SCAQMD has a streamlined set of criteria for determining if a project triggers the need for additional analysis beyond what is required for a standard stationary source permit application. These additional analyses are usually required to evaluate a project's impacts pursuant to CEQA. The SCAQMD developed a hazardous material list for CEQA evaluations (SCAQMD Form 400-CEQA, Table 1, included in Attachment B). Based on the SCAQMD criteria, asphalt is not considered a hazardous material by the SCAQMD or by any of the other State regulatory agencies referenced by SCAQMD. The SCAQMD does list hydrogen sulfide. As discussed elsewhere, asphalt is known to contain trace levels of hydrogen sulfide, predicted to be 0.04 pounds per truckload and 24.8 pounds for the entire facility for a year. The SCAQMD CEQA screening level for hydrogen sulfide is 500 pounds. Based on this criteria, the transport of asphalt would not trigger the need for additional analyses.

Federal Emergency Planning and Reporting Requirements

Federal regulations contain a number of provisions related to chemical emergency planning and reporting. The federal hazardous material lists are not binding with respect to CEQA, however, they are instructive with respect to determining which hazardous materials, and in what quantities, the federal EPA has identified as worthy of special consideration based on their potential for environmental harm. The federal hazardous material rules include:

- Emergency planning notification under Emergency Planning and Community Right to Know Act (EPCRA) section 302 (40 CFR Part 355);
- Emergency release notification under EPCRA section 304 (40 CFR Part 355);
- Toxic chemical release reporting under EPCRA section 313 (40 CFR Part 372);
- Hazardous substances release notification under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. §9601 et seq.; 40 CFR Part 302) sections 102-103; and
- Accidental release prevention requirements under the Clean Air Act ("CAA") 112(r) (40 CFR 68).

To facilitate compliance with these numerous requirements, EPA compiled a comprehensive "List of Lists," which lists all of the various hazardous materials that are regulated by any of the regulatory programs identified above. The List of Lists contains over 2,000 chemical entries; asphalt is absent from the list. As discussed elsewhere, asphalt may contain trace quantities of hydrogen sulfide, and hydrogen sulfide is listed. The various thresholds for hydrogen sulfide applicable to the EPA regulations are identified in Table 5.

Table 5: Threshold for Hydrogen Sulfide

Regulatory Program	Threshold (lbs)
Section 302 Extremely Hazardous Substance (EHS) Threshold Planning Quantity (TPQ)	500
Section 304 Extremely Hazardous Substance (EHS) Reportable Quantity (RQ)	100
CERCLA RQ	100
CAA 112(r) Threshold Quantity (TQ)	10,000

The quantity of hydrogen sulfide in each truckload (expected to be less than 0.04 pounds) is insufficient to trigger emergency planning or release reporting under any of the federal rules listed above. Based on these criteria, asphalt does not have the potential for significant environmental harm.

E. OTHER REGULATORY CONSIDERATIONS

The Calaveras County Air Pollution Control District ("District") prepared a regulatory analysis for the proposed CB Asphalt HMA plant ATC Permit application (see Attachment C). The analysis was prepared as a component of the permit application review process and concluded the facility, as proposed in the permit application, is expected to comply with all applicable District and Federal air quality rules and regulations, and issuance of the permit to construct and permit to operate was recommended. A summary of the regulatory analysis prepared by CCAPCD is provided below.

General Permitting Requirements:

According to the District engineering evaluation for the proposed HMA plant, the applicant submitted all required information for a complete permit application. A detailed process description was prepared along with a list of equipment that is relevant to the engineering evaluation. In addition, combustion emissions were provided for the heater unit, which is used in the manufacturing of HMA, and also for the

diesel fuel-fired electric generator. TACs were calculated for these emissions sources as well. Lastly, fugitive dust emissions were calculated for aggregate and conveyor transfers.

Rule 202 – Visible Emissions

Rule 202 provides a method of visually evaluating emission levels. A person shall not discharge into the atmosphere from any single source of emission any air contaminant for a period or periods aggregating more than 3 minutes in any hour which is as dark or darker in shade or obscures an observer's view to a degree equal to or greater than that designated as No. 1 on the Ringelmann Chart. The District determined the emissions of fugitive PM10 are captured using the baghouse that typically removed more than 99% of the captured emissions. Therefore, compliance with Rule 202 is expected.

Rule 205 – Nuisance

Rule 205 prohibits the discharge of any air contaminant that causes nuisance, discomfort or annoyance to the public, business or property. According to the District, the proposed project involves diesel fuel combustion and production of asphaltic concrete. There is potential for odors from these processes. In addition, the release of TAC has the potential for exposing nearby residents to increased (cancer and non-cancer) health risks. To evaluate the incremental heath risk, the annual emissions rates of TACs were used to calculate a health risk score. These results indicate that the project impacts to public health would not be significant at the nearest residents located 0.5 miles from the site. Therefore, compliance with Rule 205 is expected.

Rule 207 – Particulate Matter

Rule 207 limits discharge into the atmosphere from any source or single processing unit, exclusive of sources emitting combustion contaminants only, particulate matter emissions in excess of: 0.1 grains per

cubic foot of gas. The concentration of PM is estimated to be 0.0029 gr/dscf. Therefore, compliance with Rule 207 is expected.

Rule 211 – Process Weight

Rule 211 limits discharge of particulate matter (in lbs/hr) based on process weight rate as listed in the rule. The PM emission rate from the proposed project is estimated to be 2.12 lbs/hr. The allowable emission rate is 22.0 lbs/hr based on a process rate of 600,000 lbs/hr. Therefore, compliance with Rule 211 is expected.

Rule 419 – Non-Attainment Pollutant Air Quality Analysis

Rule 419 is used to determine if the increase in emissions would contribute to a violation of national ambient air quality standard. This rule is applicable only to sources where increase in emissions is 100 tons/yr or greater. Therefore, Rule 419 does not apply to the proposed project.

40 CFR 60.90, Subpart l – New Source Performance Standards

This particular Federal rule limits opacity to 20% over any 3 min period and limit particulate concentration to 0.04 grains per dry standard cubic feet. During a compliance source test on September 9, 2014 source tests measured particulate loading of 0.0029 gr/dscf. Therefore, compliance with this Federal requirement is expected. The opacity will be determined after plant is in production. Method 9 is the required federal procedure for determining opacity.

Impacts to Public Health

According to the District engineering evaluation for this project, health risks (both cancer and non-cancer) are less than significant (Attachment C, pgs. 8-9).

Recommendations

According to the District engineering evaluation, the proposed project would comply with all application District and Federal rules and recommendations (Attachment C, pg. 10). Therefore, issuance of the permit to construct and operate was recommended.

Discussion

The CCAPCD did not require an evaluation of emissions related to the storage of asphalt in their permit application process. According to CCAPCD Rule 402, sources emitting less than 1 ton per year of any criteria pollutant are not required to obtain a permit to operate. Although the emissions from storage tank heaters were evaluated, no such evaluation was required for asphalt storage related emissions (i.e. working losses and breathing losses) since the emissions, as noted above, are insignificant. Therefore, it can be concluded emissions from the storage of asphalt are below a reasonable level of concern.

F. CONCLUSIONS

Based on our evaluation, Yorke offers the following conclusions:

- Asphalt is not regulated as a hazardous material under most state or federal regulatory programs, although the County Code appears to include a broad definition of hazardous materials for planning and zoning evaluation purposes. While it may be considered an irritant by OSHA and may be transported at an elevated temperature, it does not have the potential to cause significant adverse environmental impacts.

- Based on the infrequent exposure to the transport trucks, the brief duration of the exposure to asphalt fumes, and the expected dilution of the fumes due to the speed of the trucks on the roadways and the distance from the roadways to receptor locations, the impact of odors during transport of asphalt to and from the facility are expected to be less than significant.

- Asphalt transportation vehicles are expected to have tailpipe emissions from fuel combustion, particulate matter (PM10, PM2.5) emissions from entrained road dust, brake and tire wear, and volatile organic compound (VOC) emissions from evaporation of fuels from the fuel tanks. At the proposed operating level of two (2) additional truck trips per day within the County, the transportation emissions from the proposed Project are negligible, and well below the significance thresholds established by the air districts in the state.

- Emissions of VOC from asphalt in the tank trucks during transportation are negligible due to the extremely low vapor pressure of asphalt, even when heated. Hydrogen sulfide, known to cause adverse health effect in sufficiently high concentrations, may be present in trace quantities in asphalt. Even if all of the hydrogen sulfide present in asphalt were released instantaneously (a very unlikely scenario), the emissions still would not pose a health risk to any exposed persons. Actual emissions of hydrogen sulfide are not known and may approach zero under conditions of transport.

- The proposed project would comply with all CCAPCD and federal rules applicable to the stationary source operations.

Thank you for the opportunity to assist you and please feel free to contact me at (714) 282-8240 if you have further questions or comments.

Sincerely,

John Furlong

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ATTACHMENT A – EMISSION CALCULATIONS

10/22/2015

Yorke ENGINEERING, LLC
www.YorkeEngr.com

Table A-1: Asphalt Haul Truck Emissions

Pollutant	RUNEX (gm/mile)	IDLEX (gm/veh/day)	STREX (gm/trip)	HOTSOAK (gm/trip)	RUNLOSS (gm/trip)	RESTLOSS (gm/veh/day)	DIURN (gm/veh/day)	PMTW (gm/mile)	PMBW (gm/mile)	Emissions (lb/day)	Emissions (ton/yr)
VOC	3.63E-01	1.87E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.096	0.015
TOG	4.13E-01	2.13E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.109	0.017
CO	1.28E+00	7.48E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.338	0.052
NOx	9.33E+00	3.05E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.469	0.383
CO2	1.72E+03	3.16E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	454.317	70.419
PM10	1.56E-01	2.43E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-02	6.17E-02	0.067	0.010
PM2.5	1.49E-01	2.32E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-03	2.65E-02	0.049	0.008
SOx	1.64E-02	3.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.004	0.001

Parameters

Trips	2	trip/day
R/T Distance	60	mi/trip
Schedule	8	hr/day
Schedule	310	day/year
Conversion	453.592	g/lb

EMFAC2014 (v1.0.7) Input Parameters

Region Type	County
Region	Calaveras
Calendar Year	2015
Season	Annual
VehClass	T7 Single Const
MdlYr	Aggregated
Speed	Aggregated
Fuel	DSL

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Table A-2: Entrained Road Dust

$E = k(sL)^{0.91} \times (W)^{1.02}$ Ref: AP-42, Section 13.2.1

Where:
E = particulate emission factor (having units matching the units of k),
k = particle size multiplier for particle size range and units of interest
sL = road surface silt loading (grams per square meter) (g/m2)
W = average weight (tons) of the vehicles traveling the road.

k (PM10) =	0.0022	lb/VMT	(Table 13.2.1-1)
k(PM2.5) =	0.00054	lb/VMT	(Table 13.2.1-1)
W =	11	tons	Assume 1/2 vehicles are heavy duty trucks at 20 tons each and 1/2 are passenger vehicles at 2 tons each
sL =	0.6	g/m2	For public roadways with less than 500 ADT (Table 13.2.1-2)

Neglect emission reduction due to precipitation

E (PM10) =	0.01595	lb/VMT
E (PM2.5) =	0.003915	lb/VMT

Emissions	Lbs/day	ton/yr
PM10	1.914001	0.29667
PM2.5	0.4698	0.072819

Table A-3: Summary of Emissions

Pollutant	Emissions	
	Lbs/day	Lbs/yr
VOC	0.10	0.01
TOG	0.11	0.02
CO	0.34	0.05
NOx	2.47	0.38
CO2	454.32	70.42
PM10	1.98	0.31
PM2.5	0.52	0.08
SOx	0.004	0.001

ATTACHMENT B – SCAQMD FORM 400-CEQA TABLE 1

South Coast Air Quality Management District

Form 400-CEQA

Table 1 - Regulated Substances List and Threshold Quantities for Accidental Release Prevention *

(344 Substances)

To assist you in answering Form 400-CEQA, Section C, Part II, Question 7 to determine what type(s) of chemicals or compounds are contained in the products used at your facility, and if the amount of the product exceeds the Threshold Quantity below, the following resources may be helpful:

1) Refer to each product's Material Safety Data Sheet (MSDS) which typically identifies the chemical, either by brand name, common name, chemical name, or Chemical Abstract Service number (CAS). If the MSDS isn't included as part of the product shipment, it may be obtained directly from the supplier, distributor, vendor or manufacturer.
2) Refer to the equipment manufacturer's specifications to establish what products are suitable for proper operation of the equipment.

For assistance in quantifying the amount (in pounds) of each chemical or compound used at your facility, contact:

1) Provider of the MSDS sheet(s);
2) Chemical manufacturer;
3) Permitting Engineering Consultant; or,

Chemical Name	CAS No.	Threshold Quantity (lbs)
Acetone Cyanohydrin[1]	75-86-5	1,000
Acetone Thiosemicarbazide	1752-30-3	1,000/10,000[2]
Acetaldehyde	75-07-0	10,000
Acetylene [Ethyne]	74-86-2	10,000
Acrolein [2-Propenal]	107-02-8	500
Acrylamide	79-06-1	1,000/10,000[2]
Acrylonitrile [2-Propenenitrile]	107-13-1	10,000
Acrylyl chloride [2-Propenoyl chloride]	814-68-6	100
Aldicarb	116-06-3	100/10,000[2]
Aldrin	309-00-2	500/10,000[2]
Allyl alcohol [2-Propen-1-o1]	107-18-61	1,000
Allylamine [2-Propen-1-amine]	107-11-9	500
Aluminum Phosphide[3]	20859-73-8	500
Aminopterin	54-62-6	500/10,000[2]
Amiton Oxalate	3734-97-2	100/10,000[2]
Ammonia[4]	7664-41-7	500
Aniline[1]	62-53-3	1,000
Antimycin A	1397-94-0	1,000/10,000[2]
ANTU	86-88-4	500/10,000[2]
Arsenic Pentoxide	1303-28-2	100/10,000[2]
Arsenous Oxide	1327-53-3	100/10,000[2]
Arsenous Trichloride	7784-34-1	500
Arsine	7784-42-1	100
Azinphos-Ethyl	2642-71-9	100/10,000[2]
Azinphos-Methyl	86-50-0	10/10,000[2]
Benzene, 1-(Chloromethyl)-4-Nitro-	100-14-1	500/10,000[2]

Form 400-CEQA, Table 1

* Extracted from California Accidental Release Prevention (CalARP) Program, final regulations published on June 28, 2004 in California Code of Regulations (CCR), Title 19, Division 2, Chapter 4.5.

Chemical Name	CAS No.	Threshold Quantity (lbs)
Benzenearsonic Acid	98-05-5	10/10,000[2]
Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	3615-21-2	500/10,000[2]
Benzotrichloride1	98-07-7	100
Bicyclo[2.2.1]Heptane-2-Carbonitrile, 5-Chloro-6-((((Methylamino)Carbonyl) Oxy)Imino)-,(1-alpha, 2-beta, 4-alpha, 5alpha, 6E))-.	15271-41-7	500/10,000[2]
Bis(Chloromethyl) Ketone	534-07-6	10/10,000[2]
Bitoscanate	4044-65-9	500/10,000[2]
Boron trichloride [Borane, trichloro-]	10294-34-5	500
Boron trifluoride [Borane, trifluoro-]	7637-07-2	500
Boron trifluoride compound with methyl ether (1:1)	353-42-4	1,000
Bromadiolone	28772-56-7	100/10,000[2]
Bromine	7726-95-6	500
Bromotrifluorethylene [Ethene, bromotrifluoro-]	598-73-2	10,000
Butane	106-97-8	10,000
Butene	25167-67-3	10,000
1-Butene	106-98-9	10,000
2-Butene	107-01-7	10,000
2-Butene-cis	590-18-1	10,000
2-Butene-trans [2-Butene, (E)]	624-64-6	10,000
1,3-Butadiene	106-99-0	10,000
Cadmium Oxide	1306-19-0	100/10,000[2]
Cadmium Stearate	2223-93-0	1,000/10,000[2]
Calcium Arsenate	7778-44-1	500/10,000[2]
Camphechlor	8001-35-2	500/10,000[2]
Cantharidin	56-25-7	100/10,000[2]
Carbachol Chloride	51-83-2	500/10,000[2]
Carbamic Acid, Methyl-,o-(((2,4-Dimethyl-1,3-Dithiolan-2-yl)Methylene)Amino)-.	26419-73-8	100/10,000[2]
Carbofuran	1563-66-2	10/10,000[2]
Carbon disulfide	75-15-0	10,000
Carbon oxysulfide [Carbon oxide sulfide (COS)]	463-58-1	10,000
Chlorine	7782-50-5	100
Chlorine dioxide [Chlorine oxide (C102)]	10049-04-4	1,000
Chlorine monoxide [Chlorine oxide]	7791-21-1	10,000
Chlormequat Chloride	999-81-5	100/10,000[2]
Chloroacetic Acid	79-11-8	100/10,000[2]
Chloroform [Methane, trichloro-]	67-66-3	10,000
Chloromethyl ether [Methane, oxybis [chloro-]	542-88-1	100
Chloromethyl methyl ether [Methane, chloromethoxy-]	107-30-2	100
Chlorophacinone	3691-35-8	100/10,000[2]
1-Chloropropylene [1-Propene, 1-chloro-]	590-21-6	10,000
2-Chloropropylene [1-Propene, 2-chloro-]	557-98-2	10,000
Chloroxuron	1982-47-4	500/10,000[2]

Chromic Chloride	10025-73-7	1/10,000[2]
Cobalt Carbonyl	10210-68-1	10/10,000[2]
Cobalt, ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidyne))Bis(6-Fluorophenolato))(2)-N,N',O,O')-	62207-76-5	100/10,000[2]
Colchicine	64-86-8	10/10,000[2]
Coumaphos	56-72-4	100/10,000[2]
Coumatetralyl	5836-29-3	500/10,000[2]
Cresol, o-	95-48-7	1,000/10,000[2]

Chemical Name	CAS No.	Threshold Quantity (lbs)
Crimidine	535-89-7	100/10,000[2]
Crotonaldehyde	4170-30-3	1,000
Crotonaldehyde, (E)	123-73-9	1,000
Cyanogen Bromide	506-68-3	500/10,000[2]
Cyanogen [Ethanedinitrile]	460-19-5	10,000
Cyanogen chloride	506-77-4	10,000
Cyanogen Iodide	506-78-5	1,000/10,000[2]
Cyanuric Fluoride	675-14-9	100
Cycloheximide	66-81-9	100/10,000[2]
Cyclohexylamine [Cyclohexanamine]	108-91-8	10,000
Cyclopropane	75-19-4	10,000
Decaborane(14)	17702-41-9	500/10,000[2]
Dialifor	10311-84-9	100/10,000[2]
Diborane	19287-45-7	100
Dichlorosilane [Silane, dichloro-]	4109-96-0	10,000
Diepoxybutane1	1464-53-5	500
Difluoroethane [Ethane, 1,1-difluoro-]	75-37-6	10,000
Digitoxin	71-63-6	100/10,000[2]
Digoxin	20830-75-5	10/10,000[2]
Dimethoate	60-51-5	500/10,000[2]
Dimethyldichlorosilane	75-78-5	500
Dimethylamine [Methanamine, N-methyl-]	124-40-3	10,000
Dimethyldrazine	57-14-7	1,000
Dimethyl-p-Phenylenediamine	99-98-9	10/10,000[2]
Dimethyl Sulfate1	77-78-1	500
Dimetilan	644-64-4	500/10,000[2]
2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463-82-1	10,000
Dinitrocresol	534-52-1	10/10,000[2]
Dinoseb	88-85-7	100/10,000[2]
Dinoterb	1420-07-1	500/10,000[2]
Diphacinone	82-66-6	10/10,000[2]
Disulfoton1	298-04-4	500
Dithiazanine Iodide	514-73-8	500/10,000[2]
Dithiobiuret	541-53-7	100/10,000[2]
Emetine, Dihydrochloride	316-42-7	1/10,000[2]

Endosulfan	115-29-7	10/10,000[2]
Endothion	2778-04-3	500/10,000[2]
Endrin	72-20-8	500/10,000[2]
Epichlorohydrin [Oxirane, (chloromethyl)-]	106-89-8	1,000
EPN	2104-64-5	100/10,000[2]
Ergocalciferol	50-14-6	1,000/10,000[2]
Ergotamine Tartrate	379-79-3	500/10,000[2]
Ethane	74-84-0	10,000
Ethyl Acetylene [1-Butyne]	107-00-6	10,000
Ethyl Chloride [Ethane, chloro-]	75-00-3	10,000
Ethyl Ether [Ethane, 1,1'-oxybis-]	60-29-7	10,000
Ethyl Mercaptan [Ethanethiol]	75-08-1	10,000
Ethyl Nitrite [Nitrous acid, ethyl ester]	109-95-5	10,000
Ethylamine [Ethanamine]	75-04-7	10,000
Ethylene [Ethene]	74-85-1	10,000

Chemical Name	CAS No.	Threshold Quantity (lbs)
Ethylene Fluorohydrin	371-62-0	10
Ethyleneimine	151-56-4	500
Ethylene Oxide	75-21-8	1,000
Ethylenediamine [1,2-Ethanediamine]	107-15-3	10,000
Ethyleneimine [Aziridine]	151-56-4	500
Fenamiphos	22224-92-6	10/10,000[2]
Fluenetil	4301-50-2	100/10,000[2]
Fluorine	7782-41-4	500
Fluoroacetamide	640-19-7	100/10,000[2]
Fluoroacetic Acid	144-49-0	10/10,000[2]
Fluoroacetyl Chloride	359-06-8	10
Fluorouracil	51-21-8	500/10,000[2]
Formaldehyde[4]	50-00-0	500
Formetanate Hydrochloride	23422-53-9	500/10,000[2]
Formparanate	17702-57-7	100/10,000[2]
Fuberidazole	3878-19-1	100/10,000[2]
Furan	110-00-9	500
Gallium Trichloride	13450-90-3	500/10,000[2]
Hydrazine	302-01-2	1,000
Hydrocyanic Acid	74-90-8	100
Hydrogen	1333-74-0	10,000
Hydrogen Chloride (gas only)	7647-01-0	500
Hydrogen Chloride [Hydrochloric Acid at conc. 37% or greater (liquid only)	7647-01-0	15,000
Hydrogen Fluoride	7664-39-3	100
Hydrogen Selenide	7783-07-5	10
Hydrogen Sulfide	7783-06-4	500
Hydroquinone5	123-31-9	500/10,000[2]
Iron, pentacarbonyl-[Iron carbonyl (Fe(CO)5), (TB-5-11)-]	13463-40-6	100
Isobenzan	297-78-9	100/10,000[2]
Isobutane [Propane, 2-methyl]	75-28-5	10,000
Isobutyronitrile	78-82-0	1,000
Isocyanic Acid, 3,4-DichlorophenylEster	102-36-3	500/10,000[2]
Isodrin	465-73-6	100/10,000[2]
Isopentane [Butane, 2-methyl-]	78-78-4	10,000
Isophorone Diisocyanate	4098-71-9	100
Isoprene [1,3-Butadiene, 2-methyl-]	78-79-5	10,000
Isopropyl Chloride [Propane, 2-chloro-]	75-29-6	10,000
Isopropyl Chloroformate [Carbonochloridic acid, 1-methylethylester]	108-23-6	1,000
Isopropylamine [2-Propanamine]	75-31-0	10,000
Leptophos	21609-90-5	500/10,000[2]
Lewisite[1]	541-25-3	10
Lindane	58-89-9	1,000/10,000[2]
Lithium Hydride[3]	7580-67-8	100
Malononitrile	109-77-3	500/10,000[2]

Manganese, Tricarbonyl Methylcyclopentadienyl[1]	12108-13-3	100
Mechlorethamine[1]	51-75-2	10
Mercuric Acetate	1600-27-7	500/10,000[2]
Mercuric Chloride	7487-94-7	500/10,000[2]
Mercuric Oxide	21908-53-2	500/10,000[2]
Methacrylonitrile [2-Propenenitrile, 2-methyl-]	126-98-7	500

Chemical Name	CAS No.	Threshold Quantity (lbs)
Methacryloyl Chloride	920-46-7	100
MethacryloyloxyethylIsocyanate	30674-80-7	100
Methamidophos	10265-92-6	100/10,000[2]
Methane	74-82-8	10,000
Methanesulfonyl Fluoride	558-25-8	1,000
Methidathion	950-37-8	500/10,000[2]
Methiocarb	2032-65-7	500/10,000[2]
Methomyl	16752-77-5	500/10,000[2]
Methoxyethylmercuric Acetate	151-38-2	500/10,000
Methyl Bromide	74-83-9	1,000
2-Methyl-1-butene	563-46-2	10,000
3-Methyl-1-butene	563-45-1	10,000
Methyl Chloride [Methane, chloro-]	74-87-3	10,000
Methyl 2-Chloroacrylate	80-63-7	500
Methyl Chloroformate [Carbonochloridic Acid, Methylester]	79-22-1	500
Methyl Ether [Methane, oxybis-]	115-10-6	10,000
Methyl Formate [Formic acid, Methyl Ester]	107-31-3	10,000
Methyl Hydrazine	60-34-4	500
Methyl Isocyanate [Methane, isocyanato-]	624-83-9	500
Methyl Isothiocyanate[3]	556-61-6	500
Methyl Mercaptan	74-93-1	500
Methylmercuric Dicyanamide	502-39-6	500/10,000[2]
Methyl Phosphonic Dichloride[3]	676-97-1	100
Methyl Thiocyanate	556-64-9	10,000
Methyltrichlorosilane	75-79-6	500
Methylamine [Methanamine]	74-89-5	10,000
2-Methylpropene [1-Propene, 2-methyl-]	115-11-7	10,000
Methyl Vinyl Ketone	78-94-4	10
Metolcarb	1129-41-5	100/10,000[2]
Mexacarbate	315-18-4	500/10,000[2]
Mitomycin C	50-07-7	500/10,000[2]
Monocrotophos	6923-22-4	10/10,0002
Muscimol	2763-96-4	500/10,000[2]
Mustard Gas[1]	505-60-2	500
Nickel Carbonyl	13463-39-3	1
Nicotine Sulfate	65-30-5	100/10,000[2]
Nitric Acid	7697-37-2	1,000

Nitric Oxide [Nitrogen oxide (NO)]	10102-43-9	100
Nitrobenzene[1]	98-95-3	10,000
Nitrogen Dioxide	10102-44-0	100
Norbormide	991-42-4	100/10,000[2]
Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide]	8014-95-7	10,000
Organorhodium Complex (PMN-82-147)	MIXTURE	10/10,000[2]
Ouabain	630-60-4	100/10,000[2]
Oxamyl	23135-22-0	100/10,000[2]
Ozone	10028-15-6	100
Paraquat Dichloride	1910-42-5	10/10,000[2]
Paraquat Methosulfate	2074-50-2	10/10,000[2]
Parathion-Methyl	298-00-0	100/10,000[2]
Paris Green	12002-03-8	500/10,000[2]

Chemical Name	CAS No.	Threshold Quantity (lbs)
Pentaborane	19624-22-7	500
Pentadecylamine	2570-26-5	100/10,000[2]
1,3-Pentadinene	504-60-9	10,000
Pentane	109-66-0	10,000
1-Pentene	109-67-1	10,000
2-Pentene, (E)-	646-04-8	10,000
2-Pentene, (Z)-	627-20-3	10,000
Peracetic acid [Ethaneperoxoic acid]	79-21-0	500
Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	594-42-3	500
Phenol	108-95-2	500/10,000[2]
Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-	4418-66-0	100/10,000[2]
Phenol, 3-(Methylethyl)-,Methylcarbamate	64-00-6	500/10,000[2]
Phenoxarsine, 10, 10' – Oxydi-	58-36-6	500/10,000[2]
Phenyl Dichloroarsine[1]	696-28-6	500
Phenylhydrazine Hydrochloride	59-88-1	1,000/10,000[2]
Phenylmercury Acetate	62-38-4	500/10,000[2]
Phenylsilatrane	2097-19-0	100/10,000[2]
Phenylthiourea	103-85-5	100/10,000[2]
Phorate[1]	298-02-2	10
Phosacetim	4104-14-7	100/10,000[2]
Phosfolan	947-02-4	100/10,000[2]
Phosgene [Carbonic dichloride]	75-44-5	10
Phosmet	732-11-6	10/10,000[2]
Phosphine	7803-51-2	500
Phosphonothioic Acid, Methyl-, S-(2-(Bis(1-Methylethyl)Amino)Ethyl)O-Ethyl Ester. [1]	50782-69-9	100
Phosphorus[3]	7723-14-0	100
Phosphorus Oxychloride [Phosphoryl chloride]	10025-87-3	500
Phosphorus Pentachloride[3]	10026-13-8	500
Phosphorus Trichloride	7719-12-2	1,000

Physostigmine	57-47-6	100/10,000[2]
Physostigmine, Salicylate (1:1)	57-64-7	100/10,000[2]
Picrotoxin	124-87-8	500/10,000[2]
Piperidine	110-89-4	1,000
Potassium Arsenite	10124-50-2	500/10,000[2]
Potassium Cyanide[3]	151-50-8	100
Potassium Silver Cyanide[3]	506-61-6	500
Promecarb	2631-37-0	500/10,000[2]
Propadiene [1,2-Propadiene]	463-49-0	10,000
Propane[6]	74-98-6	10,000
Propargyl Bromide	106-96-7	10
Propiolactone, Beta-[1]	57-57-8	500
Propionitrile	107-12-0	500
Propiophenone, 4-Amino-	70-69-9	100/10,000[2]
Propyl Chloroformate	109-61-5	500
Propylene [1-Propene]	115-07-1	10,000
Propylene Oxide	75-56-9	10,000
Propyleneimine [Aziridine, 2-methyl-]	75-55-8	10,000
Propyne [1-Propyne]	74-99-7	10,000
Prothoate	2275-18-5	100/10,000[2]

Chemical Name	CAS No.	Threshold Quantity (lbs)
Pyrene	129-00-0	1,000/10,000[2]
Pyridine, 4-Amino	504-24-5	500/10,000[2]
Pyridine, 4-Nitro-, 1-Oxide	1124-33-0	500/10,000[2]
Pyriminil	53558-25-1	100/10,000[2]
Salcomine	14167-18-1	500/10,000[2]
Sarin[1]	107-44-8	10
Selenious Acid	7783-00-8	1,000/10,000[2]
Semicarbazide Hydrochloride	563-41-7	1,000/10,000[2]
Silane	7803-62-5	10,000
Sodium Arsenate	7631-89-2	1,000/10,000[2]
Sodium Arsenite	7784-46-5	500/10,000[2]
Sodium Azide (Na (N3))[3]	26628-22-8	500
Sodium Cacodylate	124-65-2	100/10,000[2]
Sodium Cyanide (Na (CN))[3]	143-33-9	100
Sodium Fluoroacetate	62-74-8	10/10,000[2]
Sodium Selenate	13410-01-0	100/10,000[2]
Sodium Selenite	10102-18-8	100/10,000[2]
Sodium Tellurite	10102-20-2	500/10,000[2]
Stannane, Acetoxytriphenyl-	900-95-8	500/10,000[2]
Strychnine	57-24-9	100/10,000[2]
Strychnine Sulfate	60-41-3	100/10,000[2]
Sulfur Dioxide	7446-09-5	500
Sulfur Tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	7783-60-0	100

Sulfuric Acid[7]	7664-93-9	1,000
Sulfur Trioxide[3]	7446-11-9	100
Tabun1	77-81-6	10
Tellurium Hexafluoride	7783-80-4	100
Tetrafluoroethylene [Ethene, tetrafluoro-]	116-14-3	10,000
Tetramethyllead [Plumbane, tetramethyl-]	75-74-1	100
Tetramethylsilane [Silane, tetramethyl-]	75-76-3	10,000
Tetranitromethane	509-14-8	500
Thallium Sulfate	10031-59-1	100/10,000[2]
Thallous Carbonate	6533-73-9	100/10,000[2]
Thallous Chloride	7791-12-0	100/10,000[2]
Thallous Malonate	2757-18-8	100/10,000[2]
Thallous Sulfate	7446-18-6	100/10,000[2]
Thiocarbazide	2231-57-4	1,000/10,000[2]
Thiofanox	39196-18-4	100/10,000[2]
Thiosemicarbazide	79-19-6	100/10,000[2]
Thiourea, [2-Chlorophenyl-]	5344-82-1	100/10,000[2]
Thiourea, [2-Methylphenyl-]	614-78-8	500/10,000[2]
Titanium Tetrachloride [Titanium chloride (TiCl4) (T-4)-]	7550-45-0	100
Toluene-2, 4-Diisocyanate[8]	584-84-9	500
Toluene-2, 6-Diisocyanate[8]	91-08-7	100
Toluene Diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-]	26471-62-5	10,000
Triamiphos	1031-47-6	500/10,000[2]
Trichloro(Chloromethyl)Silane	1558-25-4	100
Trichloro(Dichlorophenyl)Silane	27137-85-5	500
Trichlorosilane [Silane, trichloro-]	10025-78-2	10,000
Triethoxysilane	998-30-1	500

END NOTES

[1] Substances that failed the evaluation pursuant to Health and Safety Code (H&S) §25532(g)(2) but remain listed pursuant to potential health impacts. The exemption in the California Code of Regulations (CCR), Title 19, Division 2, Chapter 4.5, Article 8, §2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

[2] These extremely hazardous substances are solids. The lesser quantity listed applies only if in powdered form and with a particle size of less than 100 microns; or if handled in solution or in molten form; or the substance has an NFPA rating for reactivity of 2, 3, or 4. Otherwise, a 10,000 pound threshold applies. The exemption in CCR § 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

[3] These extremely hazardous substances are reactive solids. The exemption in CCR §2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

Chemical Name	CAS No.	Threshold Quantity (lbs)
Trifluorochloroethylene [Ethene, chlorotrifluoro-]	79-38-9	10,000
Trimethylamine [Methanamine, N,N-dimethyl-]	75-50-3	10,000
Trimethylchlorosilane [Silane, chlorotrimethyl-]	75-77-4	1,000
Trimethylolpropane Phosphite	824-11-3	100/10,000[2]
Trimethyltin Chloride	1066-45-1	500/10,000[2]
Triphenyltin Chloride	639-58-7	500/10,000[2]
Tris(2-Chloroethyl)Amine[1]	555-77-1	100
Valinomycin	2001-95-8	1,000/10,000[2]
Vanadium Pentoxide	1314-62-1	100/10,000[2]
Vinyl Acetate Monomer	108-05-4	1,000
Vinyl Acetylene [1-Buten-3-yne]	689-97-4	10,000
Vinyl Chloride [Ethene, chloro-]	75-01-4	10,000
Vinyl Ethyl Ether [Ethene, ethoxy-]	109-92-2	10,000
Vinyl Fluoride [Ethene, fluoro-]	75-02-5	10,000
Vinyl Methyl Ether [Ethene, methoxy-]	107-25-5	10,000
Vinylidene Chloride [Ethene, 1,1-dichloro-]	75-35-4	10,000
Vinylidene Fluoride [Ethene, 1,1-difluoro-]	75-38-7	10,000
Warfarin	81-81-2	500/10,000[2]
Warfarin Sodium	129-06-6	100/10,000[2]
Xylylene Dichloride	28347-13-9	100/10,000[2]
Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino)Carbonyl)Oxy)Imino) Pentanenitrile)-,(T-4)-	58270-08-9	100/10,000[2]
Zinc Phosphide[3]	1314-84-7	500

[4] Appropriate synonyms or mixtures of extremely hazardous substances with the same CAS number are also regulated, e.g., formalin. The listing of ammonia includes anhydrous and aqueous forms of ammonia pursuant to H&S §25532(g)(2).

[5] Hydroquinone is exempt in crystalline form.

[6] Propane is also referred to as liquid petroleum gas (LPG). When propane is used as a fuel by an end user, or when it is held for retail sale as a fuel, it is excluded from the both the California and Federal RMP programs in accordance with CCR, Title 19, §2770.4.1 and Chapter 40 of the Code of Federal Regulations(CFR) Part 68, §68.126.

[7] Sulfuric acid fails the evaluation pursuant to H&S §25532(g)(2) but remains listed as Regulated Substance only under the following conditions:

a. If concentrated with greater than 100 pounds of sulfur trioxide or the acid meets the definition of oleum. (The threshold for sulfur trioxide is 100 pounds and the threshold for oleum is 10,000 pounds.)
b. If in a container with flammable hydrocarbons (flash point <730 ^{o}F).

[8] The exemption in CCR §2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

ATTACHMENT C – CCAPCD ENGINEERING EVALUATION – HOT MIX ASPHALT PLANT

CALAVERAS COUNTY
Air Pollution Control District

ENGINEERING EVALUATION
Hot Mix Asphalt Plant

HRA approach used?
Subject to NSPS - Title V?
Eng. per PERP regs - < 1 year on-site

Applicant	Equipment Location
CB Asphalt, Inc. 6739 CR 423 Palmyra, MO 63461	3560 Hogan Dam Road Valley Springs, CA
PREPARED BY:	**DATE:**
R. Kapahi *(Tel: 916.687.8352. E-Mail: ray.kapahi@gmail.com)* Air Permitting Specialists Consultant to Calaveras County APCD	July 12, 2015

Application Date: May 18, 2015

Nature of Business: Asphaltic Concrete Production

NAIC: 324120

Responsible Official	Facility Contact
Shawn Simmons (209) 920-3595	Shawn Simmons (916) 920-3595

A. PROPOSAL

CB Asphalt, Inc. proposes to construct and operate a portable 300 tons/hr hot mix asphalt (HMA) plant to be located at 3560 Hogan Dam Road in Valley Springs (Calaveras County). The project would be located at the existing Ford Company Construction site. The existing site produces aggregate and operates pursuant to Permit to Operate # 21914006. Some of the aggregate produced at this site will be used to make asphaltic concrete at CB Asphalt, Inc. See area map showing the location of the proposed asphalt plant and the existing Ford Company aggregate plant.

Asphaltic concrete consists of a mixture of aggregate, asphalt oil, and other additives. The asphaltic concrete is used for road/highway construction and repair. The proposed plant was permitted in Siskiyou County Air Pollution Control District where it was source tested in September 2014.

B. PROCESS DESCRIPTION

The process of manufacturing asphaltic concrete involves metering and transferring various sizes of aggregate into a rotary dryer. Liquid asphalt, small amount of fine aggregate and any additives are also added. In some cases, reclaimed asphalt pavement (RAP) are included in the production of HMA.

Heaters

The HMA plant is equipped with a gas or liquid fuel fired heater. A smaller heater is used to heat the asphalt oil. The finished product is loaded on to trucks for delivery to the job site.

Two categories of emissions are released:

- Fugitive Emissions (primarily dust)
- Stack Emissions (from fuel combustion in the rotary drum dryer)

Fugitive emissions are associated with material handling/transfer of aggregate from the storage piles or storage bins into the conveyor belt where it is transferred into the mixing drum. A front-end loader is used for transferring aggregate from storage piles to a conveyor. These emissions are primarily dust (PM-10 and PM-2.5). A much smaller quantity of emissions are released from the asphalt oil storage tank.

Stack emissions are associated with fuel combustion (gas or liquid fuel). Emissions consist of criteria and toxic air pollutants. Emission rates of these air pollutants can be calculated based on daily and annual production rates, emission source tests and published emission factors.

B. EQUIPMENT LIST

ID	Equipment	Description
S-101	Cold Feeder	Terex Model PAB-432
S-102	Storage Silos	
S-103	Portable Drum Mixer = rotary dryer?	Terex Model E275P
S-104	Baghouse/Fabric Filter	Terex ModelRA3-18P
S-105	Energy/Control Unit - main heater?	Terex Model PEC-3Ut
S-106	Liquid Asphalt Tank w. heater?	Terex Model CT-30P
S-107	Electric Generator (910KW)	CAT Model C-32
S-108	Standby Generator	Olympian Model XQ-60
	Front-End Loader	(Exempt from District Permitting Rules)

C. ESTIMATE OF EMISSIONS

(C1) Combustion Emissions *(Portable Asphalt Plant)*

Emissions of various air pollutants are associated with a 100 mmbtu/hr diesel fired heater were estimated in terms of lbs/ton of asphalt produced from source tests conducted for this plant by Avogadro Group, LLC. The emissions rates are shown in Table 1.

Criteria poll. based on ST

Table 1
Calculation of Emission Factors Based on September 9, 2014 Source Test

Pollutant	Measured	Calculated Emission Factor
	(lbs/hr)	*(lbs/ton)*
PM/PM-10	2.13	0.010
PM-2.5 *(Ref: AP-42 Table 11.1-4)*		0.007
CO	24.98	0.119
NOx	12.55	0.060
VOCs	0.40	0.002
Production Rate During Source Test	210 tons/hr	

These unit emission rates were used to calculate hourly, daily and annual emission rates based on the plants maximum throughput of 300 tons/hr, 250,000 tons/year production rates. The emission rates are shown in Table 2 (next page).

Table 2				
Pollutant	**EF** *(lbs/ton)*	**Emissions** *(lbs/hr)*	*(lbs/day)*	*(tons/yr)*
PM/PM-10	0.010	3.04	36.51	1.27
PM-2.5	0.007			
CO	0.119	35.69	428.23	14.87
NOx	0.060	17.93	215.14	7.47
VOCs	0.002	0.57	6.86	0.24
Max. Production Rates				
	300	tons/hr		
	3,600	tons/day (12 hr day)		
	250,000	tons/yr		

(C2) Combustion Emissions *(910 KW Electric Generator)*

The electric generator is equipped with a 1,372 hp diesel engine. The unit is currently permitted under the statewide portable equipment registration program. The emission were estimated based on manufacturer's emissions data.

Table 3				
Pollutant	**EF** *(g/hp-hr)*	**Emissions** *(lbs/hr)*	*(lbs/day)*	*(tons/yr)*
PM/PM-10	0.087	0.26	3.17	0.11
CO	1.200	3.63	43.52	1.51
NOx	3.155	9.54	114.43	3.97
VOCs	0.403	1.22	14.61	0.51
Notes EFs Based on Mfg.'s Performance Data (Attached) NOx Emissions = 90% of NOx+HC HC/VOC Emissions = 10% of NOx+HC				
BASIS				
	1,372	bhp		
	12	hrs/day		
	833	hrs/yr	(Based on 300 tons/hr Production Rate)	

Emissions from the standby electric generator have not been included as those emissions would occur only if the main generator was shutdown. Therefore, the standby generator would not release any additional emissions.

Emissions of Toxic Air Contaminants (TACs) and asphalt heating

The operation of the asphalt plant would release various TACs. These emissions are a result of diesel fuel combustions. In addition, the operation of the electric generator (S-107) would release diesel particulate matter (DPM) that is regulated as a TAC. Emissions from the small asphalt oil heater are insignificant compared to emissions from the asphalt plant and the electric generator.

Emissions of TACs from the asphalt plant are summarized in Table 4 and are based on AP-42. Emissions from DPM from the electric generator were previously calculated in Table 3 (0.11 tons/yr PM/PM-10).

Table 4
Estimate of Toxic Air Pollutants from Asphalt Plant

	Pollutant	Emission Factor *(lb/ton)*	Annual Emissions *(lb/yr)*	*(lbs/hr)*
Organics	Acenaphthene	9.00E-07	2.25E-01	2.70E-04
	Acetaldehyde	3.20E-04	8.00E+01	9.60E-02
	Anthracene	2.10E-07	5.25E-02	6.30E-05
	Benzene	2.80E-04	7.00E+01	8.40E-02
	Benz(a)anthracene	4.60E-09	1.15E-03	1.38E-06
	Benzo(a)pyrene	3.10E-10	7.75E-05	9.30E-08
	Benzo(g,h,I)perylene	5.00E-10	1.25E-04	1.50E-07
	Benzo(k)fluoranthene	1.30E-08	3.25E-03	3.90E-06
	Chrysene	3.80E-09	9.50E-04	1.14E-06
	Ethylbenzene	2.20E-03	5.50E+02	6.60E-01
	Fluoranthene	1.60E-07	4.00E-02	4.80E-05
	Formaldehyde	7.40E-04	1.85E+02	2.22E-01
	Napthalene	3.60E-05	9.00E+00	1.08E-02
	Toluene	1.00E-03	2.50E+02	3.00E-01
	Xylenes	2.70E-03	6.75E+02	8.10E-01
Metals	Arsenic	4.60E-07	1.15E-01	1.38E-04
	Beryllium	1.50E-07	3.75E-02	4.50E-05
	Cadmium	6.10E-07	1.53E-01	1.83E-04
	Chrome+6	4.80E-08	1.20E-02	1.44E-05
	Copper	2.80E-06	7.00E-01	8.40E-04
	Lead	8.90E-07	2.23E-01	2.67E-04
	Mercury	4.10E-07	1.03E-01	1.23E-04
	Nickel	3.00E-06	7.50E-01	9.00E-04
	Selenium	4.90E-07	1.23E-01	1.47E-04
	Zinc	6.80E-06	1.70E+00	2.04E-03

Notes

1. Emission factors for Asphalt Plant from Tables 11.1-9 and 11.1-11, AP-42, 12/00. US EPA
2. Max. Annual throughput = 250,000 *tons/yr* 833 hrs/yr (Based on Max Operating Rate of 300 tons/hr)
3. Calculation of Annual Emissions *(lbs/yr)*= Emiss. Factor *(lb/ton)* x Annual Throughput *(tons/yr)*
4. Calculation of Hourly Emissions *(lbs/hr)*= lbs/yr x $(8{,}760\ \text{hrs/yr})^{-1}$

Fugitive Dust Emissions

Fugitve dust is released from sources S-201 thru S-205. Emissions are controlled using the baghouse S-206 with a flow rate of 10,000 ACFM. The gas flow is at ambient conditions and is ducted from individual sources to the baghouse as follows:

The emission rate of dust (PM-10) is as follows.

Table 5 Summary of Fugitive Dust Emissions

Source	Throughput *(lbs/hr)*	Emission Factor *(lbs/ton)*	Control Efficiency	Emissions *(lbs/hr)*	Emissions *(lbs/yr)*
Aggregate Transfer Conveyor Transfer Point	2,060	5.0	99.9%	0.00309	9.27
			TOTALS	0.088	264.1
Annual Hours	3,000	hrs/yr			

Summary of Emissions

Table 6 Summary of Emissions (tons/year)

Source	PM-10	PM-2.5	CO	NOx	VOCs
Asphalt Plant	1.27	0.87	14.87	7.47	0.24
Electric Generator	0.11	0.11	1.51	3.97	0.51
Fugitive Dust	0.018	0.018	0	0	0
TOTALS	1.40	1.00	16.38	11.44	0.75

D. COMPLIANCE WITH APPLICABLE RULES AND REGULATIONS

In addition to general permitting requirements noted in Regulation I and IV, the facility is subject to certain prohibitory rules under Regulation II (Prohibitions) and Regulation IV (Authority to Construct Regulations). These rules and regulations are listed below and the project's compliance is discussed in this section.

Regulation/Rule	Description
District Regulations	
Rule 202	Visible Emissions
Rule 205	Nuisance
Rule 207	Particulate Matter
Rule 211	Process Weight per Hour
Rule 419	Nonattainment Pollutant Air Quality Analysis
Rule 421	Contribution to Violation of National Ambient Air Quality Standard

RULE 202 Visible Emissions

Rule Description
This rule provides a method of visually evaluating emission levels. A person shall not discharge into the atmosphere from any single source of emission any air contaminant for a period or periods aggregating more than 3 minutes in any hour which is as dark or darker in shade or obscures an observer's view to a degree equal to or greater than that designated as No. 1 on the Ringelmann Chart.

Compliance Status
Emissions of fugitive PM-10 are captured using the baghouse that typically removed 99+% of the captured emissions. As a result, compliance with Rule 202 is expected.

RULE 205 Nuisance

Rule Description
This rule prohibits the discharge of any air contaminant that causes nuisance, discomfort or annoyance to the public, business or property.

Compliance Status
The proposed source involves diesel fuel combustion and production of asphaltic concrete. There is potential for odors from these processes. In addition, the release of toxic air contaminants has the potential for exposing nearby residents to increased (cancer and non-cancer) health risks. To evaluate the incremental heath risk, the annual emissions rates of TACs (Tables 5 and Table 3 for DPM) were used to calculate a health risk score. The results are as follows for residences located 0.5 miles from the plant.

Table 6

Health Risk Metric	Project Impact	Significance Threshold
Residential Cancer Risk	1.39	10
Residential Non-Cancer Risk Score	0.21	1.0

These results indicate that the project impacts to public health would not be significant to residents located 0.5 miles from the site. A copy of the risk score calculation is attached.

Cumulative health Risks

Currently, there is another diesel electric generator located adjacent to the proposed asphalt plant. The generator is located at Ford Construction that will be supplying the aggregate that will be used to make the asphalt concrete. The electric generator at Ford Construction is of similar size (910 KW) and would be expected to have similar emissions of DPM. The cumulative health risks are estimated to be:

Cumulative Cancer Risk Score: 2.6

Cumulative Non-Cancer Risk Score: 0.4

The cumulative health risks would not be significant.

RULE 207 Particulate Matter

Rule Description

Discharge into the atmosphere from any source or single processing unit, exclusive of sources emitting combustion contaminants only, particulate matter emissions in excess of: 0.1 grains per cubic foot of gas is prohibited.

Compliance Status

The concentration of PM is estimated to be 0.0029 gr/dscf. Therefore, this project complies with Rule 207.

RULE 211 Process Weight Per Hour

Rule Description

Limits discharge of particulate matter (in lbs/hr) based on process weight rate as listed in Rule 212.

Compliance Status

The PM emission rate is estimated to be 2.12 lbs/hr. The allowable emission rate is 22.0 lbs/hr based on a process rate of 600,000 lbs/hr. Therefore, the source is in compliance with this rule.

RULE 419 Non-Attainment Pollutant Air Quality Analysis

Rule Description
Determine if the increase in emissions would contribute to a violation of national ambient air quality standard. This rule is applicable only to sources where increase in emissions is 100 tons/yr or greater.

Compliance Status
Exempt

Compliance with Federal Rules

40 CFR 60.90 Subpart I New Source Performance Standards

Rule Description
Limit opacity to 20% over any 3 min period and limit particulate concentration to 0.04 grains per dry standard cubic feet.

Compliance Status
The September 9, 2014 source test measured particulate loading of 0.0029 gr/dscf. Therefore, the plant is in compliance. Opacity to be determined after plant is in production. Method 9 is the required federal procedure for determining opacity.

E. IMPACTS TO PUBLIC HEALTH

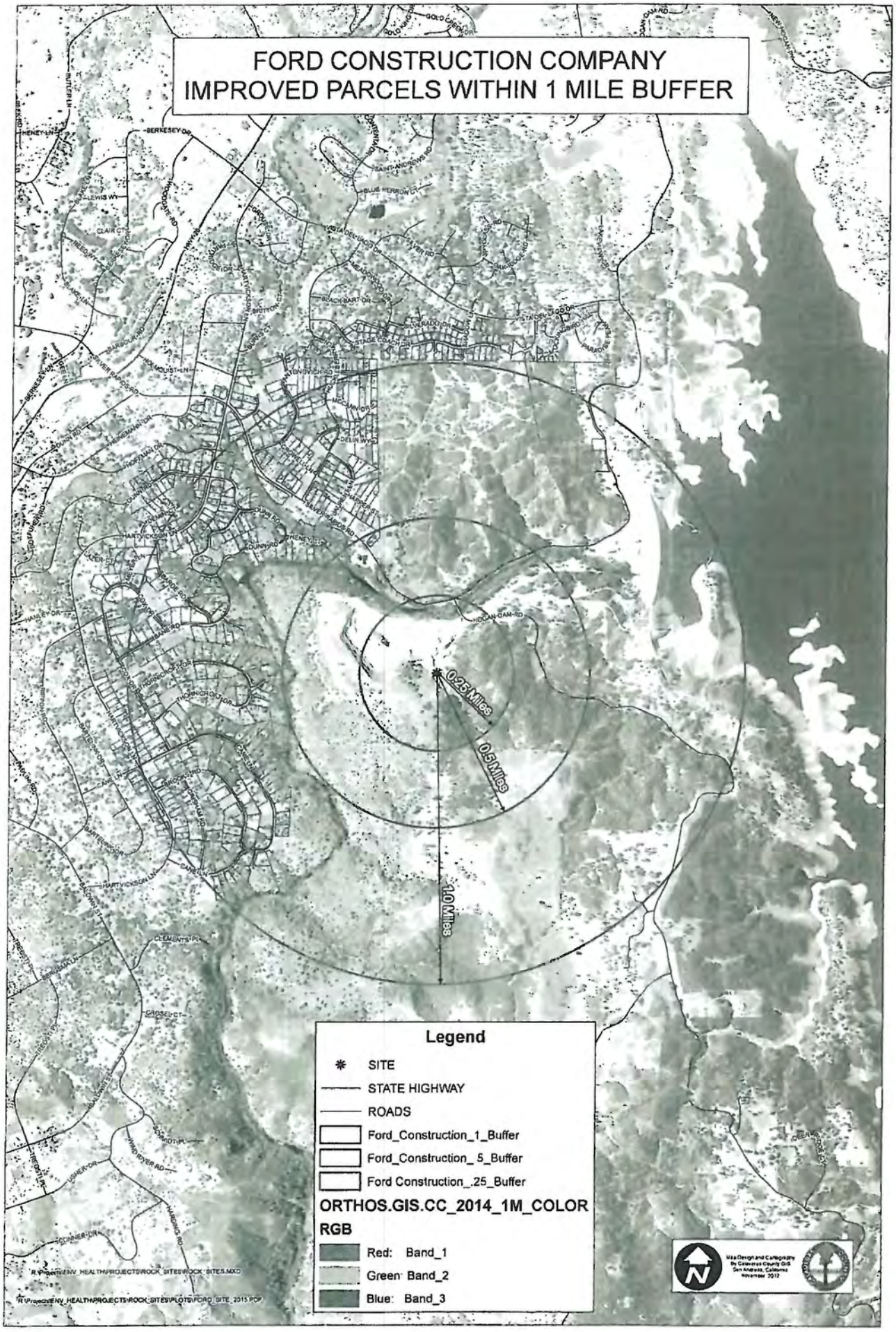
Health risks (both cancer and non-cancer) are less than significant as shown in Section C.

F. RECOMMENDATION

The proposed project would comply with the District and applicable federal rules and regulations. Therefore, issuance of permit to construct and operate is recommended.

ATTACHMENTS

1. Summary of Maximum Cancer and Non-Cancer Health Risks
2. Back-Up Reference Material


FORD CONSTRUCTION COMPANY
IMPROVED PARCELS WITHIN 1 MILE BUFFER
0.25 Miles
0.5 Miles
1.0 Miles
Legend
SITE
STATE HIGHWAY
ROADS
Ford_Construction_1_Buffer
Ford_Construction_ 5_Buffer
Ford Construction_.25_Buffer
ORTHOS.GIS.CC_2014_1M_COLOR
RGB
Red: Band_1
Green: Band_2
Blue: Band_3
R:\Projects\ENV_HEALTH\PROJECTS\ROCK_SITES\ROCK_SITES.MXD
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ATTACHMENTS

Table 6
Calculation of Cancer Risk Score

Air Toxics "Hot Spots" Information and Assessment Act of 1987 Facility Prioritization

Name **Scores Prioritization 2.0 SJVAPCD**

Applicability	Use this spreadsheet to generate a Prioritization when emission rates of HAPs are known. Entries required in yellow areas, output in grey areas.		
Author or updater	R Kapahi	*Last Update*	July 10, 2015

Facility: CB Asphalt Plant
ID#: Risk Score Calculation
Project #: Based on DPM Emissions Only
Data Entered by: Ray Kapahi (Air Permitting Specialists)
Data Reviewed by:
Location

Inputs	Operating Hours hr/yr	Release Height (m)
	833	5

	Receptor Proximity & Proximity Factors (Meters)		Emissions Potency Method			Dispersion Adjustment Method			
			Carc Scores	Non-Carc Scores	Facility Ranking	Carc Scores	Non-Carc Scores	Facility Ranking	
	0< R<100	1.000	126.05	19.54	**High Priority**	124.56756	19.54494	**High Priority**	**Medium Priority**
	100≤R<250	0.250	31.51	4.89	**High Priority**	31.14189	4.88623	**High Priority**	**Medium Priority**
	250≤R<500	0.040	5.04	0.78	**Medium Priority**	4.98270	0.78180	**Medium Priority**	**Medium Priority**
	500≤R<1000	0.011	1.39	0.21	**Medium Priority**	1.37024	0.21499	**Medium Priority**	**Medium Priority**
	1000≤R<1500	0.003	0.38	0.06	**Low Priority**	0.37370	0.05863	**Low Priority**	**Low Priority**
	1500≤R<2000	0.002	0.25	0.04	**Low Priority**	0.24914	0.03909	**Low Priority**	**Low Priority**
	2000<R	0.001	0.13	0.02	**Low Priority**	0.12457	0.01954	**Low Priority**	**Low Priority**

Height Adjustment		<100m	<250m	<500m	<1000m	<1500m	<2000m	>=2000m
<20m	60	1	0.25	0.04	0.011	0.003	0.002	0.001
20m<= <45m	9	1	0.85	0.22	0.064	0.018	0.009	0.006
=>45m	1	1	1	0.9	0.4	0.13	0.066	0.042

File: CB Asphalt Plant Risk Score.xls
Sheet: PRIOR4

1. Health Score Calculation

Table 6
Calculation of Cancer Risk Score

CAS#	Substance	Annual Emissions	Maximum Hourly	Average Hourly	Disp Adj Method Carc	EP Method Carc	EP Method Chronic	EP Method Acute	EP Max of Chronic and Acute
79345	1,1,2,2-Tetrachloroethane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79005	1,1,2-Trichloroethane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75343	1,1-Dichloroethane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	1,2,3,4,5,6,78-OctaD			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	1,2,3,4,5,6,78-OctaF			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39001020	1,2,3,4,6,7,8,9-Octachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3268879	1,2,3,4,6,7,8,9-Octachlorodibenzo-P-dioxin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
67562394	1,2,3,4,6,7,8-Heptachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
35822469	1,2,3,4,6,7,8-Heptachlorodibenzo-P-dioxin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55673897	1,2,3,4,7,8,9-Heptachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
70648269	1,2,3,4,7,8-Hexachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39227286	1,2,3,4,7,8-Hexachlorodibenzo-P-dioxin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57117449	1,2,3,6,7,8-Hexachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57653857	1,2,3,6,7,8-Hexachlorodibenzo-P-dioxin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
72918219	1,2,3,7,8,9-Hexachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19408743	1,2,3,7,8,9-Hexachlorodibenzo-P-dioxin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57117416	1,2,3,7,8-Pentachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
40321764	1,2,3,7,8-Pentachlorodibenzo-P-dioxin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
96128	1,2-Dibromo-3-chloropropane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
78875	1,2-Dichloropropane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
122667	1,2-Diphenylhydrazine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106887	1,2-Epoxybutane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106990	1,3-Butadiene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
542756	1,3-Dichloropropene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1120714	1,3-Propane sultone			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
123911	1,4-Dioxane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42397648	1,6-Dinitropyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42397659	1,8-Dinitropyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5522430	1-Nitropyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39635319	2,3,3',4,4',5,5'-HEPTACHLORBIPHENYL (PCB 189)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
38380084	2,3,3',4,4',5-HEXACHLOROBIPHENYL (PCB 156)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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Table 6
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69782907	2,3,3',4,4',5'-HEXACHLOROBIPHENYL (PCB 157)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32598144	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
52663726	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (PCB 167)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
74472370	2,3,4,4',5-PENTACHLOBIPHENYL (PCB114)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
31508006	2,3',4,4',5-PENTACHLOROBIPHENYL (PCB 118)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
65510443	2,3',4,4',5'-PENTACHOROBIPHENYL (PCB 123)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
60851345	2,3,4,6,7,8-Hexachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57117314	2,3,4,7,8-Pentachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
51207319	2,3,7,8-Tetrachlorodibenzofuran			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1746016	2,3,7,8-Tetrachlorodibenzo-P-Dioxin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
88062	2,4,6-Trichlorophenol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
615054	2,4-Diaminoanisole			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95807	2,4-Diaminotoluene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
121142	2,4-Dinitrotoluene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
53963	2-Acetylaminofluorene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
117793	2-Aminoanthraquinone			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
607578	2-Nitrofluorene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32774166	3,3',4,4',5,5'-HEXACHLOROBIPHENYL (PCB 169)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57465288	3,3',4,4',5-PENTACHLOROBIPHENYL (PCB 126)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32598133	3,3',4,4'-TETRACHLORBIPHENYL (PCB77)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
91941	3,3'-Dichlorobenzidine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
70362504	3,4,4',5-TETRACHLOROBIPHENYL (PCB 81)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
56495	3-Methylcholanthrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
101144	4,4'-Methylene bis(2 Chloroaniline) (MOCA)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
101779	4,4'-Methylenedianiline			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
92671	4-Aminobiphenyl			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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95830	4-Chloro-o-phenylenediamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
60117	4-Dimethylaminoazobenzene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57835924	4-Nitropyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3697243	5-Methylchrysene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
602879	5-Nitroacenaphthene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7496028	6-Nitrochrysene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57976	7,12-Dimethylbenz[a]anthracene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
194592	7H-Dibenzo[c,g]carbazole			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75070	Acetaldehyde	8.00E+01		9.60E-02	6.05E-03	3.67E-01	1.03E-01	0.00E+00	1.03E-01
60355	Acetamide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107028	Acrolein			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79061	Acrylamide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79107	Acrylic acid			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107131	Acrylonitrile			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107051	Allyl chloride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
319846	alpha-Hexachlorocyclohexane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
61825	Amitrole			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7664417	Ammonia			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
62533	Aniline			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7440382	Arsenic	1.15E-01		1.38E-04	1.06E-02	6.45E-01	1.38E+00	0.00E+00	1.38E+00
1016	Arsenic compounds (inorganic)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7784421	Arsine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1332214	Asbestos			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10294403	Barium chromate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
56553	Benz[a]anthracene	1.15E-03		1.38E-06	3.54E-06	2.15E-04	0.00E+00	0.00E+00	0.00E+00
71432	Benzene	7.00E+01		8.40E-02	5.68E-02	3.45E+00	2.10E-01	0.00E+00	2.10E-01
92875	Benzidine (and its salts)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1020	Benzidine-based dyes			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50328	Benzo[a]pyrene	7.75E-05		9.30E-08	2.39E-06	1.45E-04	0.00E+00	0.00E+00	0.00E+00
205992	Benzo[b]fluoranthene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
205823	Benzo[j]fluoranthene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
207089	Benzo[k]fluoranthene	3.25E-03		3.90E-06	1.00E-05	6.08E-04	0.00E+00	0.00E+00	0.00E+00
100447	Benzyl chloride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7440417	Beryllium	3.75E-02		4.50E-05	2.52E-03	1.53E-01	9.65E-01	0.00E+00	9.65E-01
319857	beta-Hexachlorocyclohexane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57578	beta-Propiolactone			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
111444	Bis(2-chloroethyl) ether {DCEE}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
542881	Bis(chloromethyl) ether			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7440439	Cadmium	1.53E-01		1.84E-04	1.80E-02	1.09E+00	1.38E+00	0.00E+00	1.38E+00
13765190	Calcium chromate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2425061	Captafol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
133062	Captan			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75150	Carbon disulfide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
630080	Carbon monoxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
56235	Carbon tetrachloride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57749	Chlordane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108171262	Chlorinated paraffin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7782505	Chlorine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10049044	Chlorine dioxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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108907	Chlorobenzene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
510156	Chlorobenzilate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	Chlorodifluoromethane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
67663	Chloroform			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107302	Chloromethyl methy			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
76062	Chloropicrin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1333820	Chromium trioxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18540299	Chromium, hexavalent	1.20E-02		1.44E-05	5.04E-02	3.06E+00	1.08E-02	0.00E+00	1.08E-02
218019	Chrysene	9.50E-04		1.14E-06	2.93E-07	1.78E-05	0.00E+00	0.00E+00	0.00E+00
1066	Coke oven emissions			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7440508	Copper	7.00E-01		8.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1319773	Cresols (mixtures of) {Cresylic acid}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
135206	Cupferron			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1073	Cyanide compounds			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57125	CYANIDE COMPOUNDS [Inorganic)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
117817	Di(2-ethylhexyl) phthalate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
226368	Dibenz[a,h]acridine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2263680	Dibenz[a,h]acridine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
53703	Dibenz[a,h]anthracene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
224420	Dibenz[a,j]acridine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
192645	Dibenzo[a,e]pyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
189640	Dibenzo[a,h]pyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
189559	Dibenzo[a,i]pyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
191300	Dibenzo[a,l]pyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1080	Dibenzofurans (chlorinated) {PCDFs} [Treated as 2378TCDD for HRA]			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	Dichlorodifluoromethene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
72559	Dichlorodiphenyldichloroethylene {DDE}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
73354	Dichloroethylene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
62737	Dichlorovos {DDVP}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9901	Diesel engine exhaust, particulate matter (Diesel PM)	2.20E+02		2.64E-01	1.85E+00	1.12E+02	7.92E+00	0.00E+00	7.92E+00
111422	Diethanolamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79447	Dimethyl carbamoyl chloride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
68122	Dimethyl formamide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
124403	Dimethylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1086	Dioxins, total, w/o individ. isomers reported {PCDDs} [Treat as 2378TCDD for HRA			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1937377	Direct Black 38			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2602462	Direct Blue 6			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16071866	Direct Brown 95 (technical grade)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106898	Epichlorohydrin			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
100414	Ethyl benzene	5.50E+02		6.60E-01	3.85E-02	2.34E+00	4.95E-02	0.00E+00	4.95E-02
75003	Ethyl chloride {Chlorethane}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table 6
Calculation of Cancer Risk Score

106934	Ethylene dibromide (EDB)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107062	Ethylene dichloride (EDC)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107211	Ethylene glycol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
111762	Ethylene glycol monobutyl ethe			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
110805	Ethylene glycol monoethyl ethe			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
111159	Ethylene glycol monoethyl ether acetate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
109864	Ethylene glycol monomethyl ethe			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
110496	Ethylene glycol monomethyl ether acetate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75218	Ethylene oxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
96457	Ethylene thiourea			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
151564	Ethyleneimine (Aziridine)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1101	Fluorides			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50000	Formaldehyde	1.85E+02		2.22E-01	3.11E-02	1.89E+00	3.70E+00	0.00E+00	3.70E+00
111308	Glutaraldehyde			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
76448	Heptachlor			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
118741	Hexachlorobenzene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1120	Hexachlorocyclohexane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
608731	Hexachlorocyclohexanes (mixed or technical grade)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
67721	Hexachloroethane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
110543	Hexane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
302012	Hydrazine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7647010	Hydrochloric acid			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
74908	Hydrocyanic acid			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7664393	Hydrogen fluoride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7783075	Hydrogen Selenide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7783075	HYDROGEN SELENIDE			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7783064	Hydrogen sulfide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
193395	Indeno[1,2,3-cd]pyrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
78591	Isophorone			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
67630	Isopropyl alcohol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7439921	Lead	2.23E-01		2.68E-04	7.49E-05	4.55E-03	0.00E+00	0.00E+00	0.00E+00
301042	Lead acetate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7758976	Lead chromate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1128	Lead compounds (inorganic)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7446277	Lead phosphate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1335326	Lead subacetate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
58899	Lindane (gamma-Hexachlorocyclohexane)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108316	Maleic anhydride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7439965	Manganese			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108394	m-Cresol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7487947	Mercuric chloride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7439976	Mercury	1.03E-01		1.24E-04	0.00E+00	0.00E+00	6.18E-01	0.00E+00	6.18E-01
67561	Methanol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
74839	Methyl bromide (Bromomethane)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table 6
Calculation of Cancer Risk Score

71556	Methyl chloroform {1,1,1-Trichloroethane}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
78933	Methyl ethyl ketone			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
624839	Methyl isocyanate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1634044	Methyl tert-butyl ether			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75092	Methylene chloride {Dichloromethane}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
101688	Methylene diphenyl diisocyanate {MDI}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
90948	Michler's ketone			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108383	m-Xylene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
91203	Naphthalene	9.00E+00		1.08E-02	8.57E-03	5.20E-01	1.80E-01	0.00E+00	1.80E-01
7440020	Nickel	7.50E-01		9.00E-04	5.46E-03	3.32E-01	2.70E+00	0.00E+00	2.70E+00
373024	Nickel acetate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3333673	Nickel carbonate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3333393	Nickel carbonate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13463393	Nickel carbonyl			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12054487	Nickel hydroxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1313991	Nickel oxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1146	Nickel refinery dust			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12035722	Nickel subsulfide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1271289	Nickelocene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7697372	Nitric acid			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
139139	Nitrilotriacetic acid			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10102440	NITROGEN DIOXIDE			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1116547	N-Nitrosodiethanolamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55185	N-Nitrosodiethylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
62759	N-Nitrosodimethylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
924163	N-Nitrosodi-n-butylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
621647	N-Nitrosodi-n-propylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
86306	N-Nitrosodiphenylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10595956	N-Nitrosomethylethylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
59892	N-Nitrosomorpholine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
684935	N-Nitroso-N-methylurea			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
100754	N-Nitrosopiperidine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
930552	N-Nitrosopyrrolidine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
90040	o-Anisidine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95487	o-Cresol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8014957	OLEUM			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95534	o-Toluidine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95476	o-Xylene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10028156	OZONE			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1151	PAHs, total, w/o individ. components reported [Treated as B(a)P for HRA]			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1336363	PCBs {Polychlorinated biphenyls}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95692	p-Chloro-o-toluidine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
120718	p-Cresidine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106445	p-Cresol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106467	p-Dichlorobenzene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table 6
Calculation of Cancer Risk Score

87865	Pentachlorophenol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
127184	Perchloroethylene {Tetrachloroethene}			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108952	Phenol			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75445	Phosgene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7803512	Phosphine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7664382	Phosphoric acid			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
85449	Phthalic anhydride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
156105	p-Nitrosodiphenylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7758012	Potassium bromate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
115071	Propylene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107982	Propylene glycol monomethyl ethe			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75569	Propylene oxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75569	Propylene oxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106423	p-Xylene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50555	Reserpine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7782492	Selenium	1.23E-01		1.48E-04	0.00E+00	0.00E+00	1.11E-03	0.00E+00	1.11E-03
7446346	Selenium sulfide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1175	Silica, crystalline			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7631869	Silica, crystalline			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10588019	Sodium dichromate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1310732	Sodium hydroxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7789062	Strontium chromate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
100425	Styrene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9960	Sulfates			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9960	SULFATES			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7446095	Sulfur Dioxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7446719	Sulfur Trioxide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7664939	Sulfuric acid			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	Tetrachlorophenols			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
62555	Thioacetamide			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
62566	Thiourea			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108883	Toluene	2.50E+02		3.00E-01	0.00E+00	0.00E+00	1.50E-01	0.00E+00	1.50E-01
1204	Toluene diisocyanate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
26471625	TOLUENE DIISOCYANATE			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
584849	Toluene-2,4-diisocyanate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
91087	Toluene-2,6-diisocyanate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8001352	Toxaphene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79016	Trichloroethylene			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	Trichlororfluormethane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	Trichlorotrifluormethane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
121448	Triethylamine			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
51796	Urethane			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7440622	Vanadium (fume or dust)			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1314621	VANADIUM PENTOXIDE			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108054	Vinyl acetate			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75014	Vinyl chloride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75354	Vinylidene chloride			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1330207	XYLENES (mixed xylenes)	6.75E+02		8.10E-01	0.00E+00	0.00E+00	1.74E-01	0.00E+00	1.74E-01

2. Back Reference Data

CB ASPHALT, INC.

ATTACHMENT (A)

GENERAL PURPOSE OF THE DRUM-MIX ASPHALT CONCRETE HOT PLANT

The plant to be utilized in this application by C.B. Asphalt Inc., is a Drum-Mix Asphalt Concrete Hot Plant. Drum mix plants have replaced almost all of the continuous mix plants and gradually replacing batch mix plants. Almost all new mixing plants produced today are drum mix plants. There are two types of drum mix plants, parallel flow and counter flow. Drum plants do all the mixing in the same drum that is used to dry and heat the aggregate. Drum plants do not resize the material or use a screen deck, hot bins, and a mixer. Drum plant advantages over batch or continuous plants are higher production rates, less moving parts, lower maintenance, and the ability to use a higher percentage of RAP (recycled asphalt pavement). By eliminating the screening process and the batch time sequence, production rates have become greater with decreased noise measurements and overall product agitation lending additional favor to clean air requirements. When RAP is introduced into a drum mix plant, it is heated both by aggregate heat transfer and by the exhaust gases of the burner. This dual heating action allows the drum mix plant to run higher RAP percentage than batch mix plants with like or lower emission parameters. It is not uncommon to have drum mix plants producing HMA with 50 percent RAP or greater. Presently, and in an effort to recycle lending favor to "green" operations, C.B. Asphalt is planning on utilizing at or near 25% RAP in the HMA produced at this facility though exact proportions will be determined by possible contract specification restriction requirements and product mix designs. RAP is usually introduced by a conveyer near the center or latter part of the drum mixer.

A drum mix plant consists of five major components, the cold aggregate feeds, bitumen supply, combination drum dryer and mixer, surge or storage silos, and the dust collection system (bag house). The cold feeds are similar to those in a batch plant with the additional function of proportioning the aggregate for the mixture. Since there is no hot bin or weigh hopper, the cold feeds must be able to accurately feed and control the blend of aggregates. Also, since there is no weigh hopper in a drum plant, the aggregate must be weighed prior to its introduction into the dryer. This is accomplished by equipping the conveyor that charges the aggregate into the dryer with a belt speed sensor. The aggregates are proportioned out of each cold feed bin onto a feeder belt according to the percentages given by the mixture design. These percentages must be based on a total percent by aggregate basis, instead of a weight by total mixture. Belt speed used to determine the wet weight of aggregate entering the drum per hour. Using the aggregate wet weight per hour and its moisture content, the correct proportion of bitumen can be mixed with the aggregate.

The aggregate is mixed with the bitumen in the dryer and the mixture is discharged onto a conveyor or bucket elevator for storage in a surge bin more commonly referred to as a silo. The asphalt binder is stored at the plant during production in the same manner as at the batch plants, either in a vertical or horizontal storage tank. Burner fuel is also stored on site in the same manner though most typically this tank is substantially smaller than the liquid bitumen tank.

39 California St. PMB 118, Valley Springs, CA. 95252
209-920-3595 – Phone
209-263-0123 – Facsimile

The original drum mix plant design is a parallel flow system. Parallel flow drum mix plants are the most common, however newer designs are counter flow systems like the plant C.B. Asphalt is utilizing with this application. The counter flow designs are slowly replacing older parallel flow plants as most typically, parallel flow plants provide yet further reductions in emissions. This fact lends additional favor to being considered and measured as cleaner with respect to pertinent environmental considerations. A parallel flow dryer or drum mixer has the aggregate flow in the direction of the exhaust gases or towards the burner. The parallel flow drum mixer mixes the aggregate with bitumen at the opposite end of the dryer from the burner while the counter flow is inverse allowing for greatly reduced burner mixing exposure times thereby reducing given emissions.

The next page is a basic schematic drawing reflecting this specific plant and its respective components. The schematic is not to scale and though extremely close, actual configuration may vary slightly to accommodate the Foothill locations truck ingress and egress etc.

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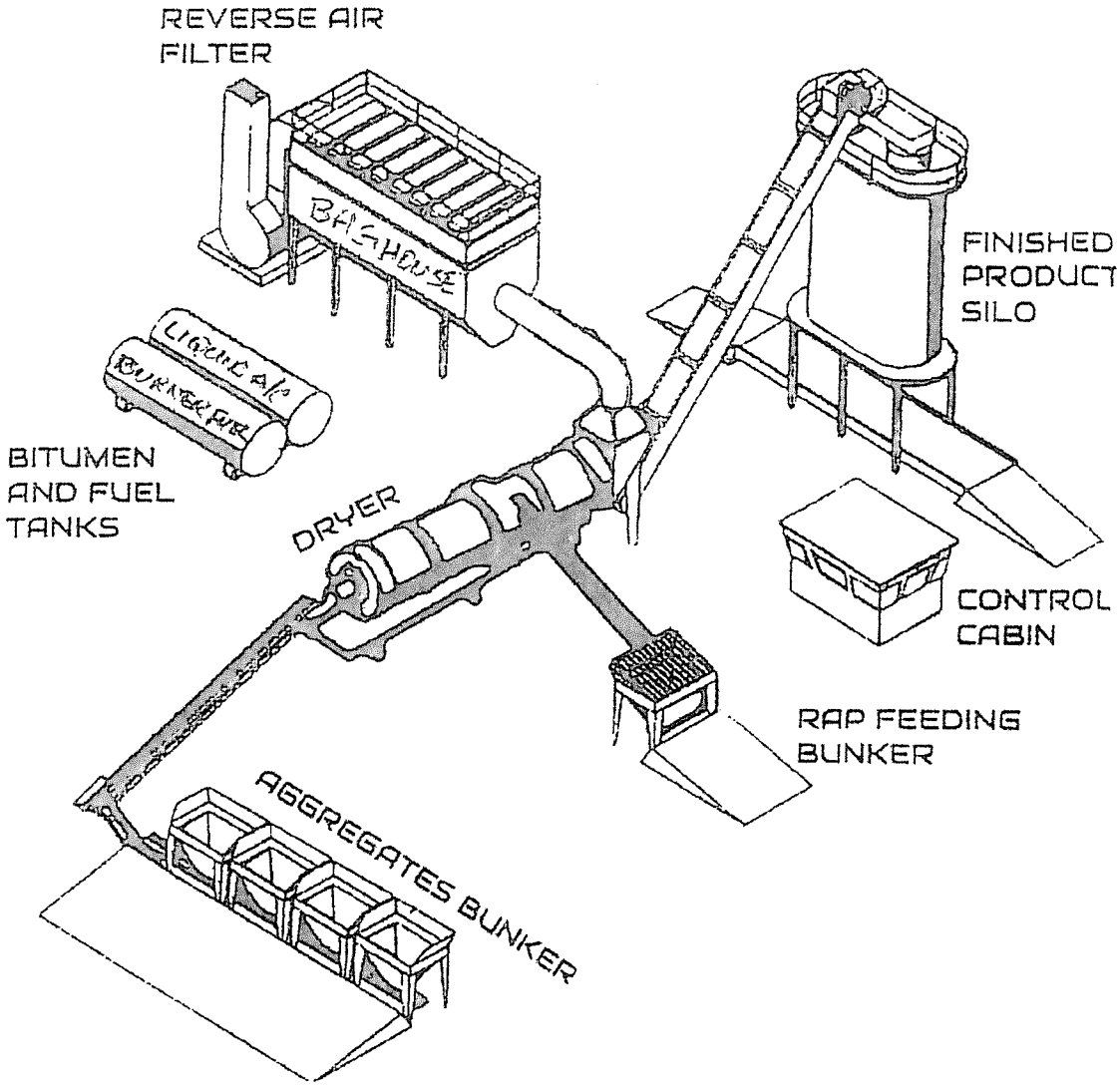

REVERSE AIR
FILTER
FINISHED
PRODUCT
SILO
BITUMEN
AND FUEL
TANKS
DRYER
CONTROL
CABIN
RAP FEEDING
BUNKER
AGGREGATES BUNKER

CB ASPHALT, INC.

May 18, 2015

Via Hand Delivery This date

Calaveras County
Air Pollution Control District
891 Mountain Ranch Road
San Andreas, CA. 95249
(209) 754-6601PH
(209) 754-6722FX

ATTENTION: Brian S. Moss

Subject: APPLICATION FOR AUTHORITY TO CONSTRUCT

Re: BUILD/INSTALL NEW EMISSIONS UNIT/PROCES

- PORTABLE HOT MIXED ASPHALT PLANT @ FOOTHILL MATERIALS QUARRY, VALLEY SPRINGS, CA.

Dear Mr. Moss,

C.B. Asphalt, Inc. (a sister company to Chester Bross Construction), in conjunction with Foothill Materials, Inc. and Chester Bross Construction, are requesting approval to erect and utilize a Portable Hot Mixed Asphalt plant on and at the Foothill Materials Quarry located at 3560 Hogan Dam Rd., in Valley Springs, CA. All three companies listed herein above are Calaveras County based companies doing business in and around Calaveras County.

We are very excited at the possibilities the approval of this application brings for Calaveras County and the numerous residents and local families that stand to benefit from the considerable employment opportunities the approval will bring.

We believe it is imperative that it be known this application brings with it temporary approval requests for a portable facility that will carry with it very minimal or no negative impact to the community, the county and the environment.

C.B. Asphalt, Inc. is planning to utilize its portable hot plant in the Foothill Quarry to furnish Hot Mixed Asphalt Concrete to Chester Bross Construction for three Caltrans projects currently under contract, as well as the forthcoming Highway 4 Angels Camp – Copperopolis project. Additionally, C.B. Asphalt, Inc. plans to offer cost effective Hot Mixed Asphalt for sale to local Calaveras County Contractors and the Calaveras County Road Department.

Presently, there are no operational Hot Mixed Asphalt Plants in Calaveras County, or Amador County on the Northern border of Calaveras County. All Hot Mixed Asphalt needs presently, must be purchased from Suppliers in San Joaquin or Tuolumne Counties which as you are aware, and does not afford Calaveras County the ability to keep the dollars within our County so to speak.

Primarily, as outlined on the application, we are planning to produce the HMA over the course of the next 6 months. The operations will not be steady or every weekday as there is simply not enough demand or expected sales volumes to justify the same. However, 95% of the operations will be during the daylight hours with the exception of one Caltrans project that mandates night operations for approximately 15 work shifts.

CB ASPHALT, INC.

The approval of this application will allow Foothill Materials, Inc. to work its employees full time producing and selling aggregates to C.B. Asphalt, Inc. to be utilized in the HMA. Most typically, without this opportunity, the Quarry and Crusher personnel struggle to work full 40 hour work weeks.

C.B. Asphalt, Inc. takes our community and our environment very seriously and will continue to offer transparency, clarity and understanding to Calaveras County and its residents in an effort to ensure the approval of this application brings with it only positive attributes lending favor to benefits for us all.

C.B. Asphalt, Inc. and the partner companies mentioned herein, are available at any time to answer questions, provide additional information and discuss concerns with you should you wish to discuss anything in greater detail.

Please find the attached application and subsequent supporting documentation.

This Portable Hot Mixed Asphalt Plant was recently permitted in Siskiyou County, through the Siskiyou County Air Pollution Control District for the same operations.

We have also provided a copy of the 2014 Emission Compliance tests for this specific Hot Plant which we are in fact leasing from Eagle Peak Rock and Paving, Inc. The plant passed all emission compliance tests with ease. The Emission tests were performed by the Avogadro Group, LLC late last year and are not presently rescheduled until November of 2015.

We welcome the opportunity to work in our home community and are pleased to mention that thus far, we have met with nothing but positive feedback and optimism from our considerable Calaveras County employees, friends and affiliates.

Please do not hesitate to contact me at any time.

Thank you and best regards,

Shawn N. Simmons
Western Division Manager

CC:/ Rogers Joseph O'Donnell: Foothill Materials Inc. Ford Construction, Inc. The Bross Group
Tyson Arbuthnot Esquire Jerry Middleton Nick Jones Mike Bross

Calaveras County
AIR POLLUTION CONTROL DISTRICT
891 Mountain Ranch Road, San Andreas, CA 95249
(209) 754-6601 FAX (209) 754-6722
Brian S. Moss ♦ Environmental Management Agency Administrator, APCO

APPLICATION FOR AUTHORITY TO CONSTRUCT

(Applications must be type written or printed in ink)

Application Fee: $348/ $87 WHR

Please provide all pertinent facility information requested in the attached application checklist. This form must be received and approved by the APCO along with application fees that are to be paid prior to the start of operation. Failure to provide a complete application and submit applicable permit fees may delay or cause denial of a Permit to Operate (PTO). Please notify the District in writing when you are ready to operate so that we may verify that the facility is constructed in accordance with the plans as submitted, and observe the equipment in operation prior issuance of the PTO.

REASON FOR APPLICATION SUBMITTAL:

XXBuild/install new emissions unit/process
☐ Change in existing permit conditions
☐ Emission Reduction Credits
☐ Modify existing permitted unit/process
Nature of modification:
☐ Relocation of equipment
Previous location:
☐Transfer of ownership
Previous business name:
☐ Other:

☐ Permit to Operate for an existing unit
☐ Change in throughput for an existing permitted unit/process

PERMIT TO BE ISSUED TO: CB Asphalt, INC
MAILING ADDRESS: 6739 CR 423 , Palmyra, MO 63461
LOCATION OF FACILITY: 3560 Hogan Dam Rd, Valley Springs, CA
SUMMARY LIST OF PROPOSED EQUIPMENT (attach checklist information):
Asphalt Concrete Hot Plant

CONSTRUCTION SCHEDULE - START: 26 MAY 20015 COMPLETE: 26 NOV 2015

SIGNATURE OF RESPONSIBLE OFFICIAL: _____

DATE: 18 MAY 2015

NAME OF OFFICIAL (please print): Shawn Simmons
TITLE OF OFFICIAL: Western Division Manager
CONTACT PERSON: SHAWN SIMMONS
TELEPHONE NUMBER: (209 920 - 3595 FAX: (209) 263 - 0123

PERMIT CONDITIONS (also see attachment):

In the absence of specific permit conditions, throughput, fuel, material consumption, capacities and hours of operation described in the permit application will be considered maximum allowable limits. All equipment, including process and pollution abatement equipment, must be properly maintained at all times. The approved PTO does not guarantee that the proposed equipment will comply with the air pollution control regulations.

FOR DISTRICT USE ONLY

PERMIT: Accepted Denied

PERMIT NUMBER: _____

SIGNED: _____ DATE: _____

Brian Moss, Air Pollution Control Officer

CB ASPHALT, INC.

- Name of Business *CB Asphalt ,INC*
- Nature of business *Producing Hot Mix Asphalt(HMA)*
- Contact Shawn Simmons (209) 747-3595
- Facility Location 3560 Hogan Dam Rd, Valley Springs, CA
- Type of use *Owner*
- Facility status *Modified*
- General purpose of facility *Quarry*
- General purpose of each process in facility *See Attachment A*
- Integrated block flow diagram process and control equipment in facility *Attachment A*
- Air pollution emission points *See Attachment B*
- Process and control equipment descriptions and specifications *See Attachment C*
- Scaled and dimensions plot plan of facility *See Attachment D*
- USGS topographical map of site location and surrounding terrain *See Attachment E*
- Estimated construction and completion date ***26 MAY 2015 TO 26 NOVEMBER 2015***
- Operating schedule ***SEE BELOW***
- Operating mode *Continuous*
- Materials Used ***AGGREGATED, HOT LIQUID ASPHALT***
- Normal operations production *300 ton/hr 3,000 ton/day 50,000 tin/project*
- Maximum design production *300 ton/hr 3,000 ton/day 50,000 ton/project*
- Equipment model number *See Attachment A*
- All exhaust gas outlet temperatures *See Attached Specification* Caterpillar Model #32
- All exhaust gas flow rates *See Attached Specification* Caterpillar Model #32
- Fuel and material storage sites ***SEE ATTACHEMENTS***

PRIMARY HOURS OF OPERATION; 4:00 AM - 6:00 PM, MONDAY - FRIDAY
APPROX. 3 WEEK CALTRANS NIGHT SUPPLY: 6:00 PM - 4:00 AM SUNDAY - THURSDAY

**** THIS SCHEDULE IS APPROXIMATE AND MAY REQUIRE SLIGHT DEVIATIONS TO ACCOMODATE CALTRANS OPERATIONS.***

Figure -1 shows the batch mix HMA production process. Raw aggregate normally is stockpiled near the production unit. The bulk aggregate moisture content typically stabilizes between 3 to 5 percent by weight.

Processing begins as the aggregate is hauled from the storage piles and is placed in the appropriate hoppers of the cold feed unit. The material is metered from the hoppers onto a conveyer belt and is transported into a rotary dryer (typically gas- or oil-fired). Dryers are equipped with flights designed to shower the aggregate inside the drum to promote drying efficiency.

As the hot aggregate leaves the dryer, it drops into a bucket elevator and is transferred to a set of vibrating screens, where it is classified into as many as four different grades (sizes) and is dropped into individual "hot" bins according to size. At newer facilities, RAP also may be transferred to a separate heated storage bin. To control aggregate size distribution in the final batch mix, the operator opens various hot bins over a weigh hopper until the desired mix and weight are obtained. Concurrent with the aggregate being weighed, liquid asphalt cement is pumped from a heated storage tank to an asphalt bucket, where it is weighed to achieve the desired aggregate-to-asphalt cement ratio in the final mix.

The aggregate from the weigh hopper is dropped into the mixer (pug mill) and dry-mixed for 6 to 10 seconds. The liquid asphalt is then dropped into the pug mill where it is mixed for an additional period of time. RAP typically is conveyed directly to the pug mill from storage hoppers and combined with the hot aggregate. Total mixing time usually is less than 60 seconds. Then the hot mix is conveyed to a hot storage silo or is dropped directly into a truck.

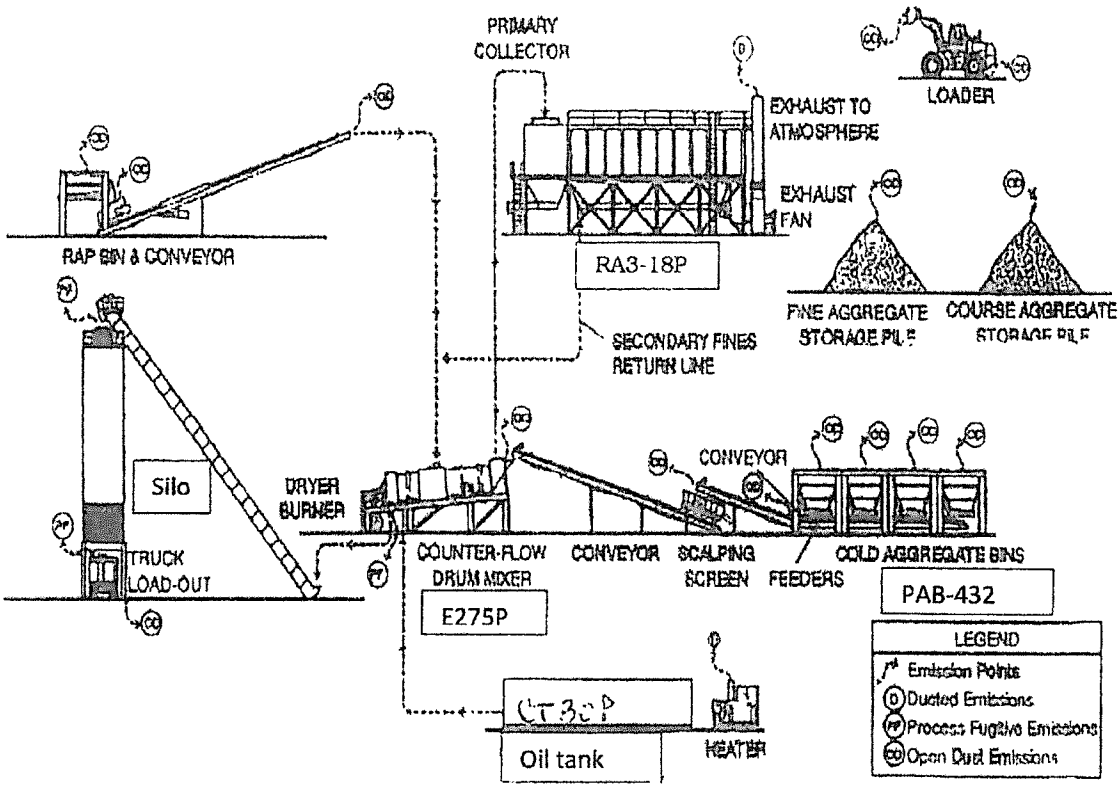
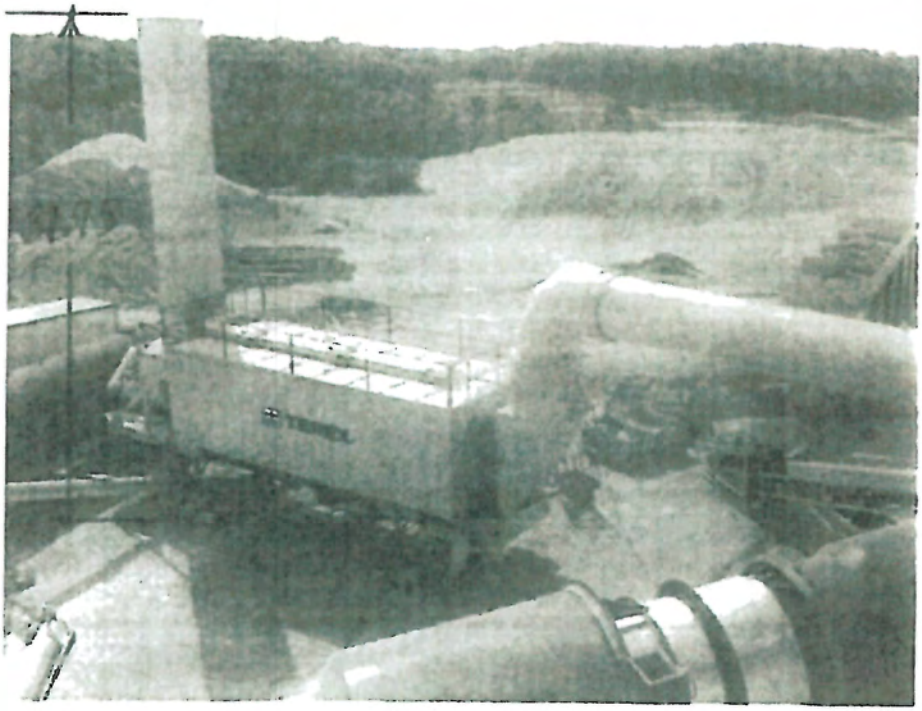

PRIMARY COLLECTOR
EXHAUST TO ATMOSPHERE
LOADER
EXHAUST FAN
RAP BIN & CONVEYOR
RA3-18P
FINE AGGREGATE STORAGE PILE
COURSE AGGREGATE STORAGE PILE
SECONDARY FINES RETURN LINE
Silo
DRYER BURNER
CONVEYOR
TRUCK LOAD-OUT
COUNTER-FLOW DRUM MIXER
CONVEYOR
SCALPING SCREEN
FEEDERS
COLD AGGREGATE BINS
PAB-432
E275P
Oil tank
HEATER
LEGEND
Emission Points
Ducted Emissions
Process Fugitive Emissions
Open Dust Emissions

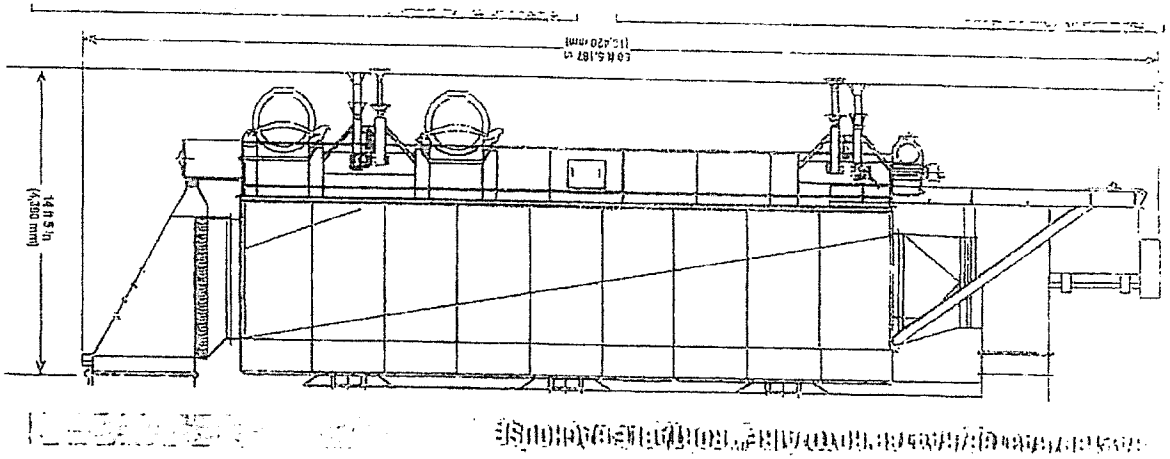
Figure 1

EMISSION POINTS

Release Height - 37.75 feet above grade

Stack Diameter - 14.04 inches at point of release





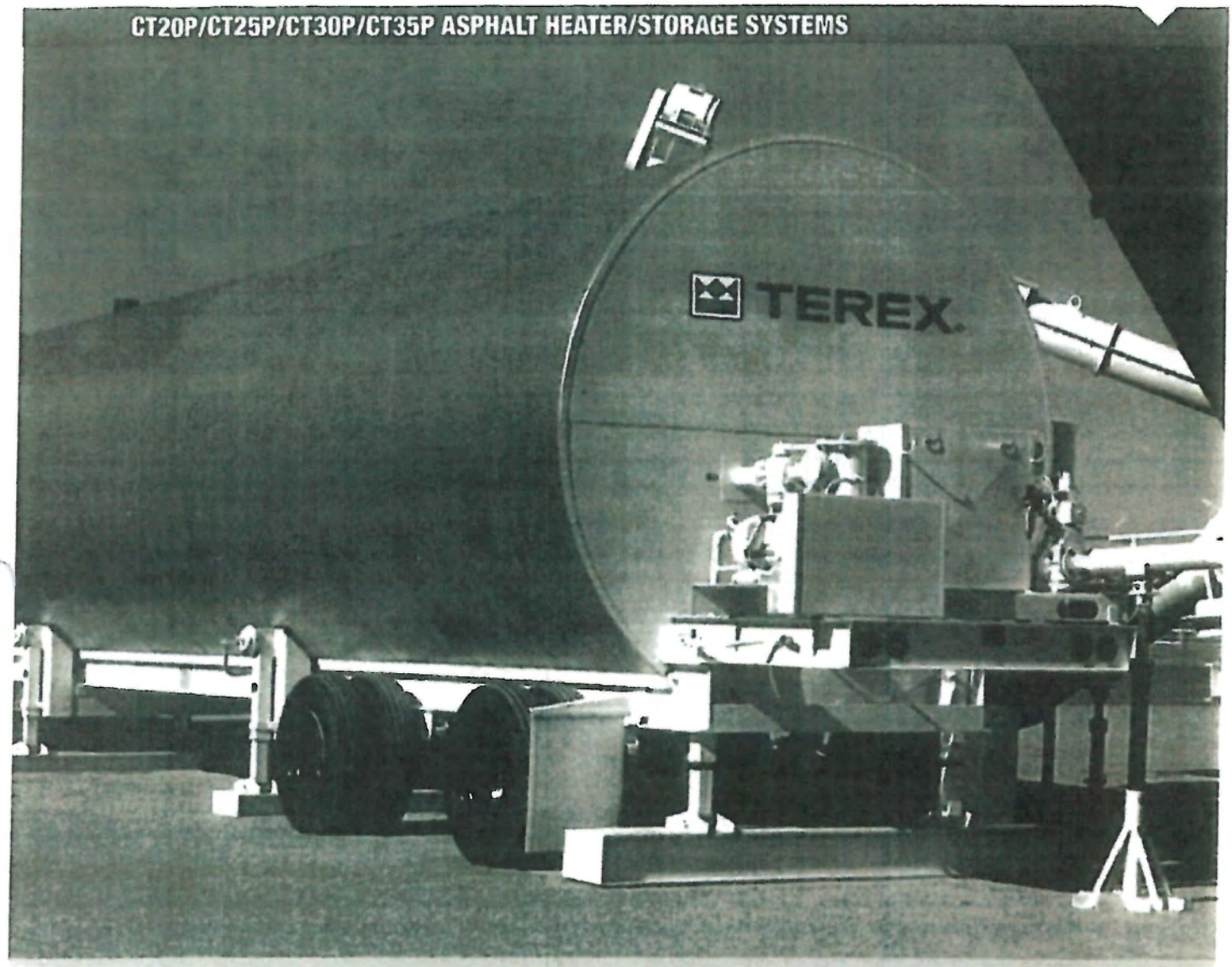
Equipment List Description

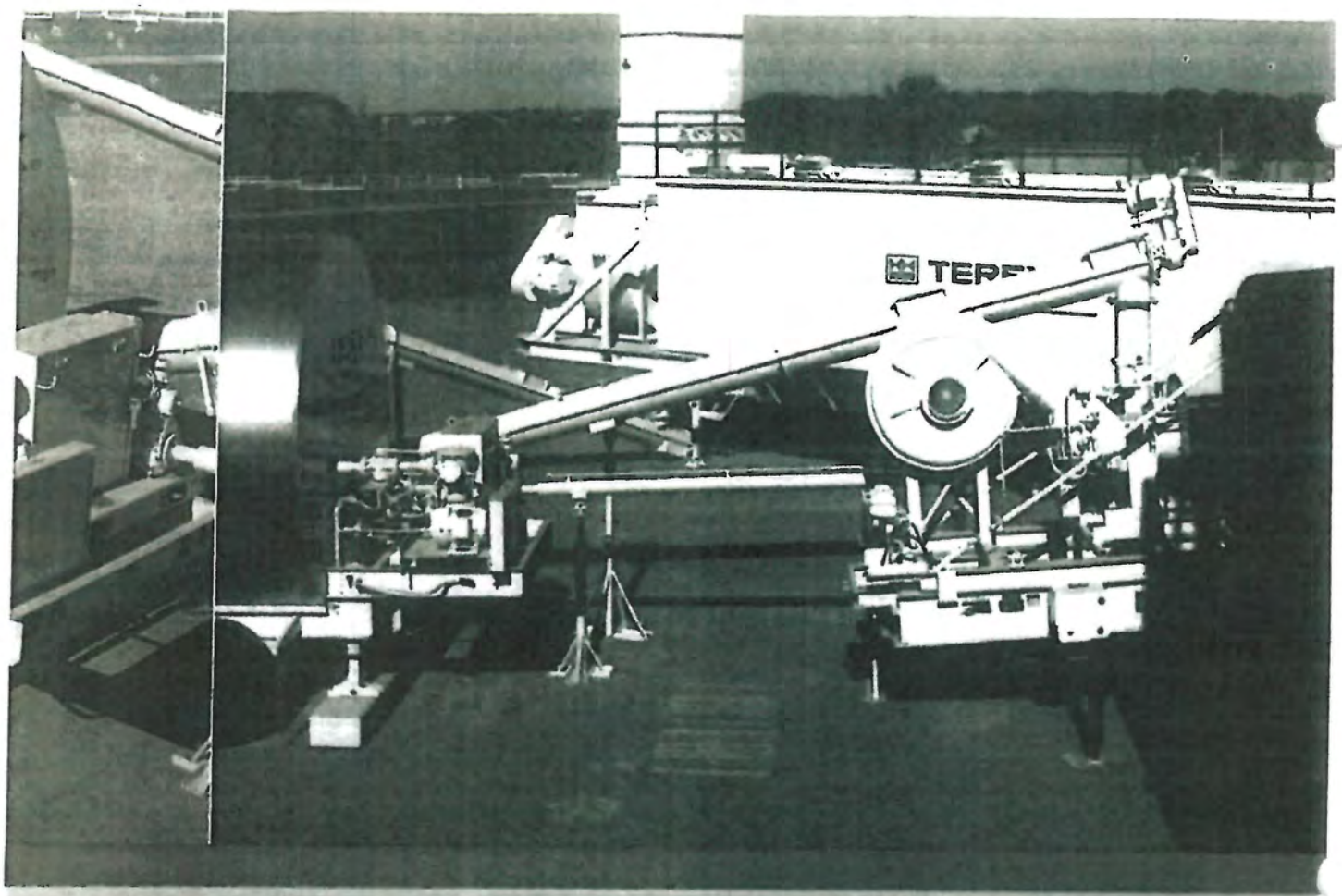
Asphalt Plant

- Cold Feed PAB-432 (Terex)
- Silo
- E275P Port Drum Mixer (Terex)
- RA3-18P Rotoaire Bag House (Terex)
- PEC-3UT Energy Center (Terex)
- CT-30P Asphalt Tank (Terex)
- 910 KW CAT Gen-set C-32 (CAT)
- 60 KW Olympian Stand-by generator XQ60 (Olympian)
- 972G Loader (CAT)

TEREX®

CT20P/CT25P/CT30P/CT35P ASPHALT HEATER/STORAGE SYSTEMS





Heating System

Hot-oil coil: 45 linear ft (13.72 m) of 2 in (50.8 mm) Schedule 40 pipe with 180 degree LR return elbows per 1,000 gal (3,785.34 L) of storage. Split in two loops to provide optimum heat transfer rate. Located on the bottom, extends the length of tank for even heat distribution.

Automatic temperature control: mounted, piped and wired. Adjustable, indicator-type temperature controller with weatherproof housing. Hot-oil solenoid valve on return side. Wired together with seal-tight connectors.

Thermometer: 2 ½ in (63.5 mm) dial, 50-450°F (10-232.2°C) with 12 in (305 mm) stem mounted in drywell.

Portability

Portable models include a 420 gal (1,589.8 L) internal fuel tank that is integrally designed into the gooseneck. The entire area on top of the gooseneck is available to mount hot-oil heater pumps or other accessories. Dual tandem axle and suspension system with 11:00 x 22.5 in (508 mm) tires, 5th-wheel kingpin, air brake system, mud flaps and DOT lighting system. Special configurations of axle placement are available. Portable models have one pair of landing jacks installed in front frame with one heavy-duty support pad. Ideal for disconnecting trailer from tractor. CT35P has a triple axle and suspension system.

Standard Equipment

Self-store blocking assemblies eliminate the need for screw jacks and timber blocking. Blocking assemblies consist of crank-type landing jacks and steel-beam cribbing. The steel cribbing assembly provides ample stability for storage, parking and set-up. Adjustments to the tank leveling are easily accomplished, even after the plant has been put into operation.

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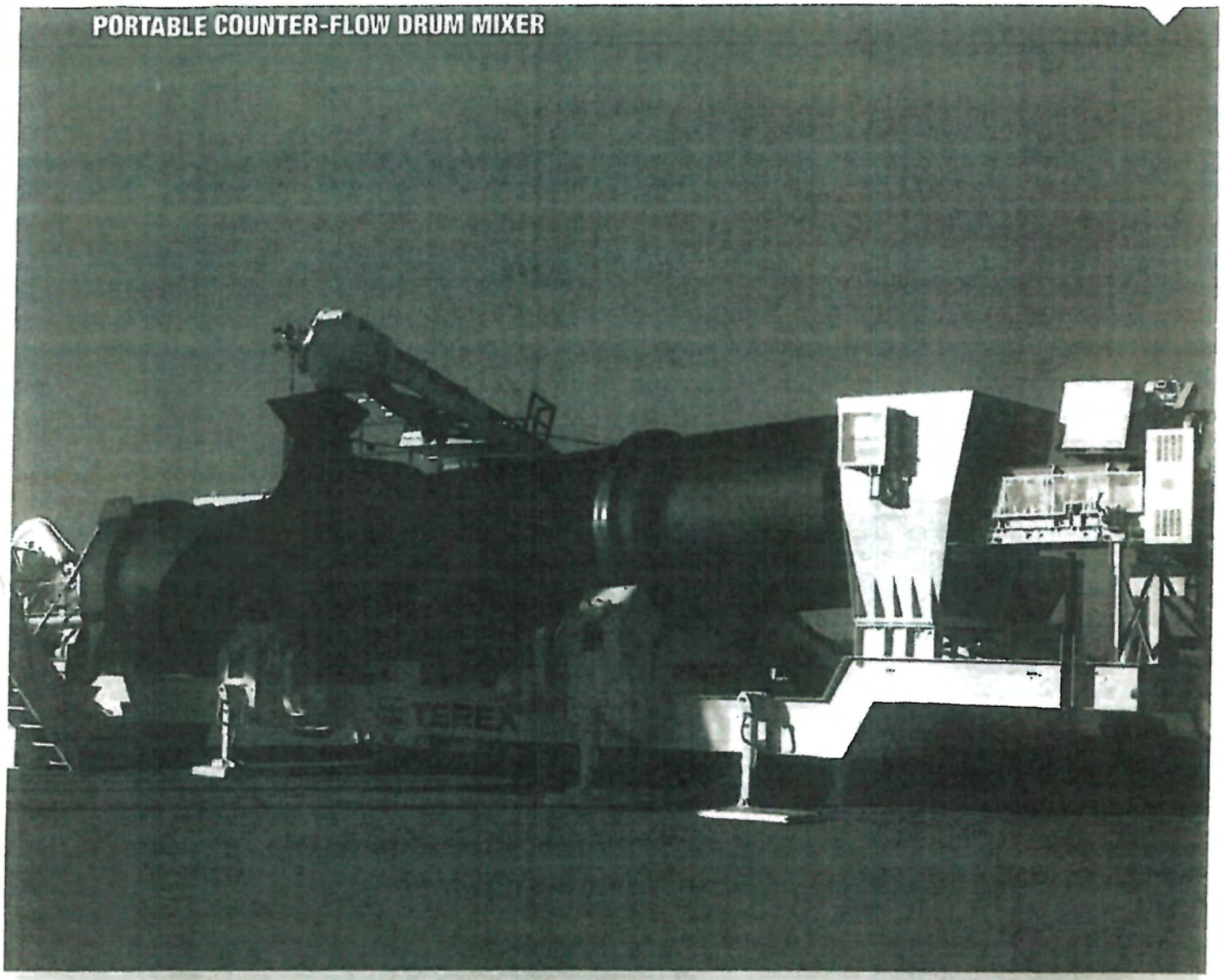

- Main frame is constructed of wide-flange structural beams with cross connections for trunnion support and rigidity.
- Trunnion drive powered by four 25 hp (18.64 kW) motors, each through a shaft-mounted reducer with torque arm, positive start sheaves and belts with belt guard.
- Drum rotates on pillow block bearing mounted 18 in (457.2 mm) diameter x 9 in (228.6 mm) wide trunnions. Trunnion shaft extended to one side for mounting of drive. Pivot-type trunnion assembly adjustment allows proper positioning of drum without the use of trunnion flanges.
- Two thrust rollers 12 in (304.8 mm) diameter x 2.5 in (63.5 mm) thick are bolted to reinforced main frame cross members to check longitudinal travel of drum.
- 1/4 in (6.35 mm) exhaust air housing assembly and 3/16 in (4.76 mm) outlet duct are constructed of 3/16 in (4.76 mm) steel plate.
- Complete portability includes triaxle assembly, tires, wheels, air brakes, lights, mud flaps and 5th wheel towing kingpin.
- Duct work is self-contained for quick set-up and ease of transportation.

STANDARD EQUIPMENT

REVERSIBLE SLINGER FEEDER

Aggregate is introduced "live" into the drum by a 24 in (609.6 mm) wide slinger conveyor driven by a 5 hp (3.73 kW) motor. Slinger is manually indexed. Conveyor assembly includes heat-resistant belting with recessed splice.

- Screw-type-belt take-ups on tail pulley shaft; 20° toughing idlers; loading hopper and head pulley with recessed flange bearings for heat resistance. The slinger is manually indexed for calibration of the virgin aggregate scale.

FINES RETURN AUGER

Collected baghouse particles are returned to the mixing chamber 10 in (254 mm) diameter screw conveyor powered by a 10 hp (7.46 kW) motor. Liquid asphalt pipe enters through the discharge housing.

SIDE ENTRY RECYCLE INLET

Inlet chute assembly and outer collar assembly are mounted to the main frame. Widow entry ports installed in the shell, complete with proportioning flights to direct reclaimed material into the drum at a point downstream of the burner.

STARJET "HAUCK" BURNER SJ-360 (E225P) SJ-520 (E275P)

Provides high-efficiency combustion for maximum BTU availability for heat transfer. The high-pressure turbo produces more induced primary air, thus creating maximum heat release with minimum secondary air requirement. A skid-mounted pump is furnished for fuel oil supply.

AUTOMATIC BURNER CONTROL

Performs all operational functions and sequential checks before firing through automatic production cycles and subsequent shutdown with a minimum of operator intervention. A unique two-stage control system allows automatic burner proportioning for the utmost accuracy. Both mix temperature and exhaust temperature are monitored and provide necessary input for proper positioning of the burner control motor.

AUTOMATIC ASPHALT PROPORTIONING

Provided by a 2 in (.05 m) Viking pump A/C variable frequency drive, strainer and secondary pump with pick up to meter asphalt cement supply to the drum mixer. Calibration valve, sample valve and positive flow switch are included.

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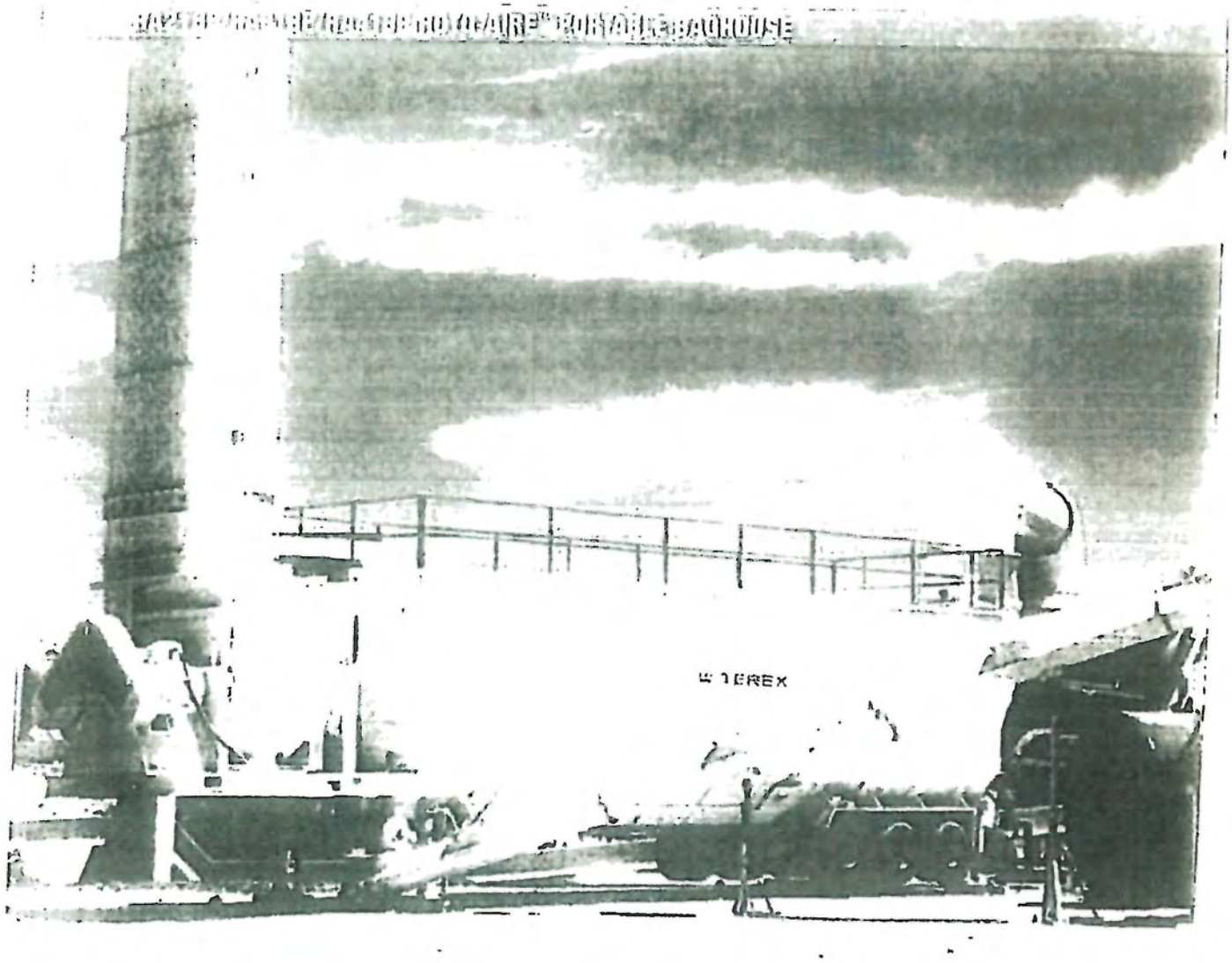


RA2 RA3 RA4 RA2 RA3 RA4
ROTO-AIRE™
PORTABLE BAGHOUSE

(Right) The abrupt directional change within the inertial separator captures the heavier particles in the exhaust stream. Fast set-up with onboard hydraulic system.

(Right) Integral to the structure is a kingpin for fifth-wheel towing and best transport underclearance in the industry.

Features

- The unique ROTO-AIRE™ cleansing system eliminates the problems and operating expense inherent with jet-pulse cleaning without the disadvantage of the complex damper systems and blowers associated with old-style differential pressure systems
- Roto-Step differential pressure cleaning significantly extends bag life
- 2-pocket steel-wire galvanized cage
- Operating costs lowered by elimination of air compressor and diaphragm valves
- Easy-access top bag removal
- Cloth area range up to 15,451 @ 1000 bags or 19,987 @ 1000 (+2 ft) bags
- Over-temperature shutdown system
- Automatic roto-step operating control to maintain high filtration efficiency
- Production levels from 93 to 435 tph (120 to 562 (+2 ft) mtph)
- The ROTO-AIRE™ baghouse provides fabric filter emission control of the highest quality and is easily capable of conforming to particulate emission requirements of the United States Environmental Protection Agency standards for hot-mix asphalt plants

Baghouse Structure

Welded construction. Integral to the structure is a kingpin for fifth-wheel towing and pneumatic-tired running gear with air control brakes. Upper "house" section contains roto-step cleaning module, tube sheets, air channels, bag access doors, handrails, kickplates, ladder, clean gas outlet plenum and dirty gas inlet with diffuser.

Lower "hopper" section includes hopper with two 16 in (406.4 mm) dust-collection screw conveyors, each driven by an electric motor (kW/hp varies by unit), gathering cross screw (center outlet) with 5 hp (4 kW) electric motor drive.

Portable	Relocatable
RA2 16 in (406.4 mm)	RA2 12 in (304.8 mm)
RA3 16 in (406.4 mm)	RA3 12 in (304.8 mm)
RA4 18 in (457.2 mm)	RA4 16 in (406.4 mm)

Collector

Cloth area range

3,311 ft² to 15,451 ft² (4,293 m² to 19,987 m²)

Air volume range

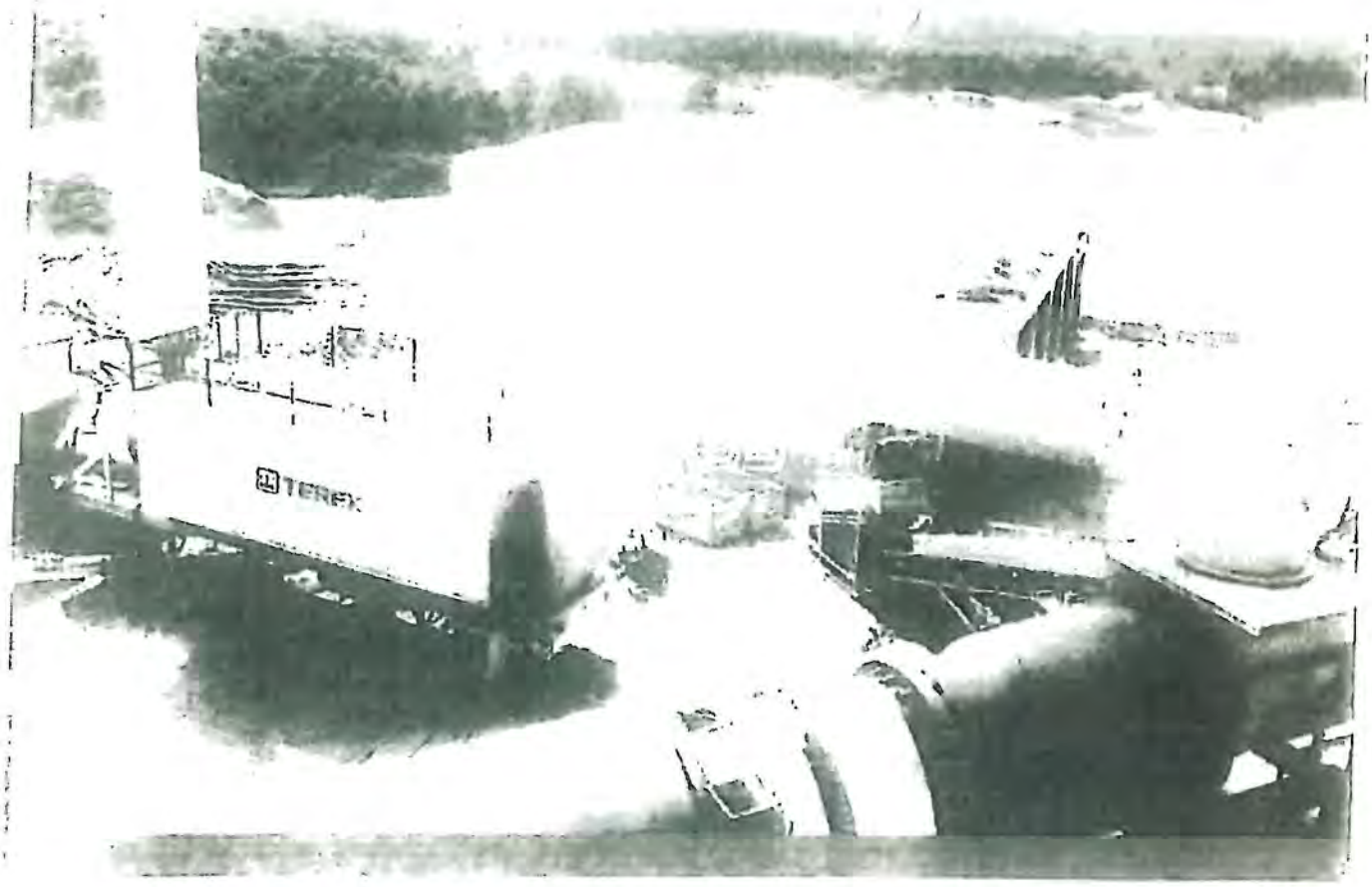
14,899 ft³/min to 69,528 ft³/min. (19,273 m³/min to 89,940 m³/min).

Bags and Cages

100% Aramid fiber. These unique bags enable the installation of more cloth in a given house size so portable units are significantly smaller and lighter than pulse-cleaned designs with the same cloth area. Top bag is easily removed through quick access doors.

Roto-Step Cleaning Unit

Two, three or four 19-station step rotation units with .50 hp (.37 kW) drive gear motor, proximity switch to stop rotor at park position and adjustable gate for smooth return of cleaned bags to online service.



Isolation Damper

Over-temperature shut-down system includes isolation damper and two thermocouples located for inlet/outlet temperature sensing. Sensors activate damper closing and automatically shut off exhaust fan.

Inertial Separator

Inertial separators function well by using a very simple principle, i.e., "abrupt directional change." The exhaust gas and the lightweight fine dust particles do not carry the same "inertia" as do heavy larger dust particles. Therefore, the air and fine dust can change direction very abruptly and manage to get through the deflector grid. The heavier particles, however, cannot make the abrupt turn and their weight and velocity forces them to continue on a straight line path, allowing them to be captured.

The inertial collector also acts as an air classifier, separating the larger coarse material from the fine material, allowing either or both materials to be metered and returned to the mixer by removing approximately 62 to 75 percent of the heavier particles from the air stream prior to baghouse entry, the fabric filter (bag) wear and dust loading cake on the bags is greatly reduced. It is the coarse and heavier particles that are the most abrasive.

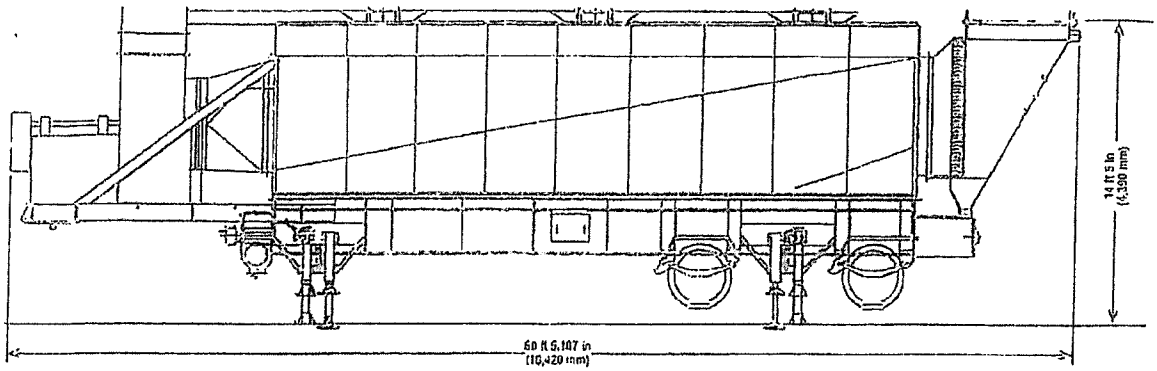
Heat Exchanger

Terex Roadbuilding ROTO-AIRE™ baghouses utilize pre-heated exhaust gas to depressurize the bag plenums for cleaning instead of using cold outside ambient air injection typical of compressed-air pulse systems and reverse air purge systems. Injection of cold outside air can result in condensation on the internal walls and tube sheet, leading to premature rust and deterioration as well as forming a moist dust cake on the bags, thereby sealing the bags and reducing air flow.

A further advantage of using preheated air occurs during stack gas testing for SO_x, NO_x, CO, CO_2, and VOCs. When testing pulse-jet or reverse air bag-cleaning systems for chemical emissions, it is very difficult to achieve accurate readings unless the cleaning systems are turned off during the testing. The injection of cold 20.9 percent oxygen dilution air into the reduced oxygen air stream (9 to 12 percent oxygen content) can dramatically alter stack gas readings. ROTO-AIRE™ baghouses can use the air bag cleaning system during testing, since the gas stream is at baghouse temperature and contains gases which are identical in content to the stack gases being monitored.

Fan Drive

- Variable-frequency drive for exhaust fan eliminates damper
- Lower electrical power consumption
- More efficient exhaust air flow



Transport Dimensions

RA218P	
Length	41 ft (12,500 mm)
Height	14 ft 5 in (4,390 mm)
Width	11 ft 10.75 in (3,630 mm)
Weight	43,340 lb (19,658 kg)
RA318P	
Length	50 ft 4 in (15,340 mm)
Height	14 ft 5 in (4,390 mm)
Width	11 ft 10.75 in (3,630 mm)
Weight	56,260 lb (25,519 kg)
RA418P	
Length	60 ft 5.187 in (18,420 mm)
Height	14 ft 5 in (4,390 mm)
Width	11 ft 10.75 in (3,630 mm)
Weight	63,860 lb (29,966 kg)

Maximum Bags

RA218P	504*
RA318P	756*
RA418P	1,008*

Maximum Available Cloth Area

RA218P	9,072 ft² (842.79 m²)
RA318P	13,608 ft² (1,264.19 m²)
RA418P	18,144 ft² (1,685.63 m²)

Optional Equipment

- 1 in (25.4 mm) high-density insulation with thick coverskin
- Pneumatic dust return system
- Screw conveyor dust return system
- Pre-collector for coarse particle removal
- Self-contained hydraulic erection system
- Variable frequency fan drives

Airflow Capacity

RA218P	up to 40,824 ACFM
RA318P	up to 61,236 ACFM
RA418P	up to 81,648 ACFM

Fan Motor

RA218P	E225P
RA318P	E3 300P, E300P
RA418P	E3 400P, E3 500P, E400P, E500P

*Each bag has a 18.0 ft² (1.67 m²) filter area bag. Materials and specifications subject to change without notice.

Important Note: All electrical specifications used herein refer to U.S. standards of voltage and frequency. Any electrical equipment that is factory-installed will be compatible with power availability requirements of any customer's country.

Terex Roadbuilding
P.O. Box 1985, Oklahoma City, OK 73101
(405) 787.6020 1-888-TEREXRB
www.terexrb.com

TEREX

Silo Filter Vents are used to vent silos into which material is conveyed. As the material fills the silo, it displaces air which must be vented without loss of product. Product collected on the filter bags is returned to the silo by shaking the bags after filling has completed. Silo Filter Vents are available in two series: Natural Vented, where a low positive silo pressure is acceptable, and Blower Assisted, where a negative silo pressure is desirable. A Continuous Duty Vent (72 CS) is also available to provide continuous filtration through two individual compartments, one in the collecting mode while the other is being cleaned. All electric, no air supply is required.

Operation

NATURAL VENTS (IS & LS models)

Displaced air from the silo filling operation is filtered through the bags. After each truck is unloaded the bags must be cleaned. To clean the bags, shake them for approximately 60 seconds. (Mini-C10 control is optional)

BLOWER ASSISTED VENTS (IS & LS Models)

Displaced air from the silo filling operation is filtered through the bags, while being assisted by a blower. After each truck is unloaded the bags must be cleaned. To clean the bags, turn the blower off and shake them for approximately 60 seconds. (Mini-C8 control is optional)

CONTINUOUS DUTY VENT (72 CS)

The baghouse is split into two 36 bag compartments so that one is in use at all times. A timer switches the diverter valve to the opposite side once every hour. The timer can be adjusted to switch sides more frequently if necessary. Each time the damper position is switched, the compartment taken off line is shaken for 60 seconds. (C6G2E control is included)

Controls (optional)

Mini C-8

Includes solid state one minute timer with automatic stop, terminal blocks, indicator light, and fuse for manual control of blower and activation of cycle (cleaning cycle actuates after blower shuts down), in a NEMA 4 enclosure [115VAC /1/60]. Motor starters not included. Shipped loose for field installation.

Mini C-10

Includes solid state one minute timer with automatic stop, terminal blocks indicator light, fuse and push button control to activate cleaning cycle, in a NEMA 4 enclosure [115VAC/1/60]. Motor starters not included. Shipped loose for field installation.

Dusty Dustless®

GRIFFIN FILTERS
106 METROPOLITAN PARK DRIVE ◊ LIVERPOOL, NY 13088, USA
Tel: (315) 451-5300 ◊ Fax: (315) 451-2338

SILO FILTER VENT UNITS

Model No	No of Bags	Bag Length (in.)	Cloth Area (sq. ft.)	Shaker Motor HP	Shaker Motor Rating	Blower Motor HP*	Blower CFM @ 6" WC	Optional Control Panel NEMA 4	Wt. (lbs)
54-IS	54	38 1/2	188	1/4 HP	1200, 230-460/3/60			C10	550
54-KS	54	79	375	1/4 HP	1200, 230-460/3/60			C10	980
36-JS	36	38 1/2	125	1/6 HP	1200, 115/1/60			C8	645
36-LS	36	79	250	1/6 HP	1200, 115/1/60	5	1280	C8	845
72-JS	72	38 1/2	250	1/4 HP	1200, 230-460/3/60	5	1280	C8	1000
72-LS	72	79	500	1/4 HP	1200, 230-460/3/60	5	1810	C8	1600
72 CS	72	79	500	1/6 HP (2)	1200, 115/1/60	5	1280	included	1410

	Width	Depth	Overall Height
36-IS	37	37	51
36-KS	37	37	91
36-JS	37	37	65
36-LS	37	37	110
54-IS	57	37	51
54-KS	57	37	91
54-JS	57	37	70
54-LS	57	37	110
72-IS	74	37	51
72-KS	74	37	91
72-JS	74	37	70
72-LS	74	37	110
72 CS	70	34	110

Automatic Overfill Control System

The Griffin Overfill Control System, consisting of a closing valve, limit switch and control panel, completely automates silo filling and venting while preventing overfill and resulting damage. It is designed to operate on any pneumatic silo filling system with any number of fill pipes. If the high bin signal is clear when the trucker connects his hose to the fill pipe, the butterfly valve will open and the silo will accept material. When the high bin indicator is activated, an alarm will sound telling the trucker to stop his unloading operation. In 90 seconds the butterfly valve will close, sealing off the fill pipe and making it impossible for the trucker to continue pumping in material. The bags in the dust collection system will then automatically shake clean.

OCS Model	Fill Size (in.)	Pipe Qty. (sq. ft.)	Silo Compartments	Closings Valve
OCS421	4	2	1	2
OCS521	5	2	1	2

Note: A bin level indicator is required to activate this control system. Pressure safety valve and alarm bell are optional

DESCRIPTION	PART NO
BIN LEVEL INDICATOR	950-KA301-KB1
PRESSURE SAFETY VALVE	800-PSV
ALARM BELL	900-340-4N5

Companion Flange

Companion Flange	11/2" tall
Slanted Roof Adapter	6"short side
(18 degree slope)	16"tall side
Box Roof Adapter	6" tall

Slanted Roof Adapter

Box Roof Adapter

GRIFFIN FILTERS
106 METROPOLITAN PARK DRIVE ◊ LIVERPOOL, NY 13088, USA
Tel: (315) 451-5300 ◊ Fax: (315) 451-2338

CATERPILLAR MODEL #C32

EQUIPMENT DESCRIPTION:

Manufacturing Specification sheets (attach if any)

- Manufacture: Caterpillar
- Model #: C32
- Serial #: SYC00933
- Family name: 6CPXL32.0ESK
- Horsepower (hp): 1372 bhp
- Btu/hour: .335
- Fuel consumption gals/hr: 65.7
- Year engine was manufactured: 2006
- Fuel Type: Diesel

PRODUCTION INFORMATION:

[1] Data needed for back up generators only

- Maximum production output (kw-hrs):_____
- Average production output (kw-hrs):_____
- Estimated hours of operation per day:_____
- Estimated days of operation per year: _____
- Maximum hours needed for testing (Yearly):_____
- Best hours needed for maintenance : _____

PORTABLE REGISTRATION INFORMATION:

Attach all state registration information if applicable.

- Registration Number: 143161

CRITERIA EMISSION DATA:

CO (lbs/hr @ 50% and 100% power): 1.2

NOx (lbs/hr @ 50% and 100% power): 4.03

SOx (lbs/hr @ 50% and 100% power):

PM_{10} (lbs/hr@ 50% and 100% power): .097

Lead (lbs/hr @ 50% and 100% power):

GEN SET PACKAGE PERFORMANCE DATA [SYC00933]

MARCH 21, 2008

(SYC00933)-ENGINE (G5C00634)-GENERATOR (SXC01055)-GENSET

For Help Desk Phone Numbers Click here

Performance Number: DM7714 Change Level: 02

Sales Model: C32 DITA	Combustion: DI	Aspr: TA
Engine Power: 1000 W/F EKW 1042 W/O F EKW 1,502 HP	Speed: 1,800 RPM	After Cooler: ATAAC
Manifold Type: DRY	Governor Type: ELEC	After Cooler Temp(F): 120
Turbo Quantity: 2	Engine App: GP	Turbo Arrangement:
Hertz: 60	Engine Rating: PGS	Strategy:
Rating Type: STANDBY	Certification: EPA TIER-2 2006 - ----	

General Performance Data 1

GEN W/F EKW	PERCENT LOAD	ENGINE POWER BHP	ENGINE BMEP PSI	FUEL RATE LB/BHP-HR	FUEL RATE GPH	INTAKE MFLD TEMP DEG F	INTAKE MFLD P IN-HG	INTAKE AIR FLOW CFM	EXH MFLD TEMP DEG F	EXH STACK TEMP DEG F	EXH GAS FLOW CFM
1,000.0	100	1502	337	0.346	74.3	123.4	69.2	2,998.2	1,288.8	964.9	8,387.2
900.0	90	1358	305	0.342	66.4	110.7	61.2	2,789.9	1,218.7	923.4	7,560.9
800.0	80	1215	273	0.350	60.8	106.0	57.6	2,705.1	1,177.2	891.3	7,158.3
750.0	75	1145	257	0.355	58.0	103.6	55.8	2,662.7	1,156.6	875.8	6,957.0
700.0	70	1074	241	0.356	54.7	100.0	52.2	2,560.3	1,133.6	860.4	6,618.0
600.0	60	933	210	0.355	47.4	91.2	42.9	2,284.9	1,077.6	829.8	5,784.5
500.0	50	793	178	0.354	40.1	82.6	33.5	2,012.9	1,011.2	799.3	4,954.7
400.0	40	658	148	0.354	33.3	75.6	24.9	1,751.6	935.8	759.2	4,163.6
300.0	30	519	117	0.359	26.6	70.3	17.0	1,504.4	843.6	698.5	3,397.3
250.0	25	449	101	0.363	23.3	68.4	13.3	1,384.3	790.9	661.5	3,019.4
200.0	20	378	85	0.371	20.0	66.7	9.8	1,264.3	733.5	619.7	2,648.6
100.0	10	233	52	0.414	13.8	64.2	5.2	1,126.5	597.2	502.5	2,076.5

General Performance Data 2

GEN W/F EKW	PERCENT LOAD	ENGINE POWER BHP	COMPRESS OUT PRESS KPA	COMPRESS OUT TEMP DEG F
1,000.0	100	1502	251	416.8
900.0	90	1358	223	379.2
800.0	80	1215	210	363.4
750.0	75	1145	204	355.5
700.0	70	1074	191	340.5
600.0	60	933	158	301.6
500.0	50	793	125	262.9
400.0	40	658	94	225.7
300.0	30	519	66	188.4
250.0	25	449	52	169.7

EMISSIONS DATA

EPA TIER-2 2006 - ---- ********** B5

Gaseous emissions data measurements are consistent with those described in EPA 40 CFR PART 89 SUBPART D and ISO 8178 for measuring HC, CO, PM, and NOx

Gaseous emissions values are WEIGHTED CYCLE AVERAGES and are in compliance with the following non-road regulations:

LOCALITY	AGENCY/LEVEL	MAX LIMITS - g/kW-hr		
U.S. (incl Calif)	EPA/TIER-2	CO:3.5	NOx + HC:6.4	PM:0.2

EXHAUST STACK DIAMETER	--
WET EXHAUST MASS	13,789.9 LB/HR
WET EXHAUST FLOW (964.40 F STACK TEMP)	8,390.77 CFM
WET EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	2,840.00 STD CFM
DRY EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)	2,601.63 STD CFM
FUEL FLOW RATE	74 GAL/HR

RATED SPEED "Not to exceed data"

GEN PWR EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT
1,000.0	100	1502	19.3300	1.1800	.0800	.1500	9.2000
750.0	75	1145	11.6600	.6400	.1900	.1100	10.8000
500.0	50	793	7.2700	1.2300	.2200	.1800	11.7000
250.0	25	449	4.9500	1.8500	.1900	.2400	13.2000
100.0	10	233	3.1600	2.8000	.3400	.2000	15.3000

RATED SPEED "Nominal Data"

GEN PWR EKW	PERCENT LOAD	ENGINE POWER BHP	TOTAL NOX (AS NO2) LB/HR	TOTAL CO LB/HR	TOTAL HC LB/HR	TOTAL CO2 LB/HR	PART MATTER LB/HR	OXYGEN IN EXHAUST PERCENT
1,000.0	100	1502	15.9700	.6300	.0400	1,675.8	.0700	9.2000
750.0	75	1145	9.6400	.3400	.1000	1,299.5	.0600	10.8000
500.0	50	793	6.0100	.6600	.1200	890.2	.0900	11.7000
250.0	25	449	4.0900	.9900	.1000	511.4	.1200	13.2000
100.0	10	233	2.6100	1.5000	.1800	301.2	.1000	15.3000

Altitude Capability Data(Corrected Power Altitude Capability)

Ambient Operating Temp. Altitude	50 F	68 F	86 F	104 F	122 F	NORMAL
0 F	1,502 hp	1,502 hp	1,502 hp	1,502 hp	1,502 hp	1,502 hp
984 F	1,502 hp	1,502 hp	1,502 hp	1,502 hp	1,502 hp	1,502 hp
1,640 F	1,502 hp	1,502 hp	1,502 hp	1,502 hp	1,502 hp	1,502 hp
3,281 F	1,502 hp	1,502 hp	1,502 hp	1,498 hp	1,451 hp	1,502 hp
4,921 F	1,502 hp	1,502 hp	1,455 hp	1,409 hp	1,365 hp	1,502 hp
6,562 F	1,466 hp	1,415 hp	1,368 hp	1,325 hp	1,283 hp	1,428 hp
8,202 F	1,376 hp	1,329 hp	1,286 hp	1,244 hp	1,206 hp	1,357 hp
9,843 F	1,293 hp	1,248 hp	1,207 hp	1,168 hp	1,132 hp	1,287 hp
11,483 F	1,212 hp	1,171 hp	1,132 hp	1,096 hp	1,062 hp	1,222 hp
13,123 F	1,136 hp	1,097 hp	1,061 hp	1,027 hp	995 hp	1,159 hp
14,764 F	1,065 hp	1,027 hp	994 hp	962 hp	932 hp	1,098 hp

The powers listed above and all the Powers displayed are Corrected Powers

Identification Reference and Notes

Engine Arrangement:	2537557	Lube Oil Press @ Rated Spd(PSI):	58.6
Effective Serial No:	SYC00001	Piston Speed @ Rated Eng SPD (FT/Min):	1,785.4
Primary Engine Test Spec:	0K6255	Max Operating Altitude(FT):	4,921.3
Performance Parm Ref:	TM5739	PEEC Elect Control Module Ref	
Performance Data Ref:	DM7714	PEEC Personality Cont Mod Ref	
Aux Coolant Pump Perf Ref:			
Cooling System Perf Ref:		Turbocharger Model	GTA5518BS
Certification Ref:	EPA TIER 2	Fuel Injector	
Certification Year:	2006	Timing-Static (DEG):	--
Compression Ratio:	15.0	Timing-Static Advance (DEG):	--
Combustion System:	DI	Timing-Static (MM):	--
Aftercooler Temperature (F):	120	Unit Injector Timing (MM):	--
Crankcase Blowby Rate(CFH):	--	Torque Rise (percent)	--
Fuel Rate (Rated RPM) No Load (Gal/HR):	--	Peak Torque Speed RPM	--
Lube Oil Press @ Low Idle Spd(PSI):	37.4	Peak Torque (LB/FT):	--

ATTACHMENT 1 OF 1

Engine Model

Manufacturer: **CATERPILLAR INC.**

Engine category: **Nonroad Over 50 Hp**

EPA Engine Family: **6CPXL32.0ESK**

Mfr Family Name: **NA**

Process Code: **New Submission**

U-R-001-0293

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
1	C32	1505@2100	376	530.8	4422@1400	418	393.4	EM,DI,TC,ECM,CAC
2	C32	1505@2100	376	530.8	4422@1400	418	393.4	EM,DI,TC,ECM,CAC
3	C32	1330@1500	469	473.0	NA	NA	NA	EM, DI, TC, ECM
5	C32	1502@1800	418	506.3	NA	NA	NA	EM, DI, TC, ECM,
6	C32	1357@1800	374	453.1	NA	NA	NA	EM, DI, TC, ECM,
8	C32	1357@1800	374	453.1	NA	NA	NA	EM, DI, TC, ECM,
9	C32	1508@1800	418	506.3	NA	NA	NA	EM, DI, TC, ECM,

Engine Model Summary Form

Manufacturer: CATERPILLAR INC.

Engine category: Nonroad Over 50 Hp

EPA Engine Family: 6CPXL32.0ESK

Mfr Family Name:

Process Code: Running Change - 1

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
2		1500@2100						
9		1502@1800						
10	C32	1016@1750	294	345.9	3635@1300	349	305.4	EM, DI, TC, ECM,
11	C32	1257@1800	356	431.2	NA	NA	NA	EM, DI, TC, ECM,
12	C32	1126@1800	324	392.1	NA	NA	NA	EM, DI, TC, ECM,
13	C32	970@1750	277	325.8	3461@1300	335	292.9	EM, DI, TC, ECM,
14	C32	951@1800	266	322.7	3205@1400	298	280.3	EM, DI, TC, ECM,
15	C32	951@2100	238	336.9	3205@1400	298	280.3	EM, DI, TC, ECM,
16	C32	1125@1800	319	386.1	3792@1400	365	344.1	EM, DI, TC, ECM,
17	C32	1125@2100	279	393.6	3792@1400	365	344.1	EM, DI, TC, ECM,
18	C32	1200@1800	336	407.3	4045@1400	390	367.2	EM, DI, TC, ECM,
19	C32	1200@2100	301	425.9	4045@1400	390	367.2	EM, DI, TC, ECM,
20	C32	1350@1800	384	464.7	4552@1400	438	412.4	EM, DI, TC, ECM,
21	C32	1350@2100	340	480.6	4552@1400	438	412.4	EM, DI, TC, ECM,

Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**

Engine category: **Nonroad Over 50 Hp**

EPA Engine Family: **6CPXL32.0ESK - 3**

Mfr Family Name:

Process Code: **Running Change**

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
24	C32	1502@1800	418	506.3	NA	NA	NA	EM, DI, TC, ECM,
25	C32	1330@1500	469	473.0	NA	NA	NA	EM, DI, TC, ECM,
26	C32	1502@1800	418	506.3	NA	NA	NA	EM, DI, TC, ECM,
27	C32	1330@1500	469	473.0	NA	NA	NA	EM, DI, TC, ECM,
28	C32	1257@1800	356	431.2	NA	NA	NA	EM, DI, TC, ECM,
29	C32	1110@1500	408	412.2	NA	NA	NA	EM, DI, TC, ECM,

Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**

Engine category: **Nonroad Over 50 Hp**

EPA Engine Family: **6CPXL32.0ESK**

Mfr Family Name:

Process Code: **Running Change - 4**

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
30	C32	923@1800	257	311.4	3554@1300	345	302.0	EM, DI, TC, ECM,
31	C32	800@2100	207	292.9	2447@1350	239	217.1	EM, DI, TC, ECM,

MANUFAGTURER'S PERFORMANCE DATA

MODEL: C32
DATA REF NO.: DM9046-00
GENSET RATING (W/F FAN): 910.0 EKW PRIME 60 HERTZ @ 1800 RPM
CERTIFICATION YEAR: 2007 CERT AGENCY: CARB/EPA

GENERAL PERFORMANCE DATA

GEN W/F EKW	ENG PWR BHP	FUEL RATE LB/BHP-HR	FUEL RATE GPH	EXHAUST STACK TEMP DEG F	EXHAUST GAS FLOW CFM	O2 (DRY) IN EXH (VOL) %	H2O IN EXH (VOL) %
910.0	1372	0.335	65.7	793.2	7599.7	11.10	8.38

EMISSIONS DATA

Gaseous emissions data measurements are consistent with those described in EPA 40 CFR PART 89 SUBPART D and ISO 8178 for measuring HC, CO, PM, and NOx.

Gaseous emissions values are WEIGHTED CYCLE AVERAGES and are in compliance with the following non-road regulations:

EPA and CARB Tier 2

MAX Limit - GM/HP-HR		
CO	NOX + HC	PM
2.6	4.8	0.15

EPA ENGINE FAMILY NAME: 7CPXL32.0ESK
CARB EXECUTIVE ORDER NO.: U-R-001-0314

"D2 CYCLE CERT LIMITS" for the engine family are:

GM/HP-HR		
CO	NOX + HC	PM
1.2	4.03	0.097

CORRECTION FACTORS

FOR CALIFORNIA LOW SULFUR FUEL

NOX = (0.87)

PARTICULATE MATTER = (0.90)

CALCULATION OF SOX

SOX = (0.05 % FUEL SULFUR BY WEIGHT/100) (FUEL RATE/HR) (1.9981)

EMISSIONS DATA [SYC00933]

(SYC00933)-ENGINE (G5C00634)-GENERATOR (SXC01055)-GENSET

MARCH 21, 2008

For Help Desk Phone Numbers Click here

Engine Emissions Data

Emissions Definitions

Serial Number	SYC00933
Engine Arrangement Number	2537557
As - Shipped Certification	EPA / CARB @ Constant Speed
Labeled Model Year	2006
Family Code	6CPXL32.0ESK
Family Certification	EPA Tier 2
Spec Number	0K6255
Has Engine Been Rerated?	No
Interlock Code Actual Progression	No Interlock Code Progression
As - Shipped Interlock Code	No Interlock Code
As - Shipped Flash File	3031612
As - Shipped Flash File CRB	3170632
As - Shipped CORR FL Power at RPM	No Power Available at 1800 rpms
Build Date	12Dec2006

This is not an official emission certificate. This is for emission data information only.

This emission data is Caterpillar's best estimate for this rating. If actual emissions are required then an emission test needs to be run on your engine.

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

Statewide Portable Equipment Registration

Registration No: 143161

Legal Owner or Operator:	Eagle Peak Rock & Paving In..
Mailing Address:	P.O Box 879 Alturas. CA 96101
Engine Description:	
Certified portable internal combustion engine, compression ignition, Caterpillar, model C32, Serial No: SYC00933, (Unit Number: 2805), rated a: 1372 bhp, diesel fueled, equipped with turbocharger and aftercooler.	
U.S. EPA Engine Family Name:	6CPXL32.0ESK
Conditions:	see attached
Home District..	Modoc County Air Pollution Contro' District
Engine Inspection Discount:	No inspection discount claimed

Expiration Date: April 30, 2017

Michael J. Tollstrup
Chief, Project Assessment Branch
Stationary Source Division

Statewide Portable Equipment Registration

The following operating conditions apply for registration #143161
Engine Serial # : SYC00933

General Requirements

1. The engine shall be properly maintained and kept in good operating condition at all times.
2. The registration identification sticker shall be affixed in a visible location on the registered portable engine at all times. The metal placard shall be securely affixed on a vertical surface of the portable engine in a location that is readily visible from a distance. A legible copy of the registration certificate and operating conditions shall be kept on site with the portable engine and shall be made accessible to the Air Resources Board or district representative upon request.
3. Engine fuel shall meet standards for California motor vehicle fuels as set forth in Chapter 5, Division 3, Title 13, of the California Code of Regulations, or shall have been verified through the In-Use Strategies to Control Emissions From Diesel Engines verification procedure per Title 13 of the California Code of Regulations commencing with section 2700.
4. The engine and any replacement engine shall not reside at the same location for more than 12 consecutive months
5. The operation of this engine shall not cause a public nuisance.
6. The engine shall be equipped with operational and properly maintained non-resettable hour time meter.
7. For each rental engine or an engine used in a third party rental transaction, the owner shall provide each person who rents the portable engine with a copy of the registration certificate, including operating conditions, as part of the rental agreement.
8. The operator of a portable engine or equipment unit shall obtain district authorization prior to operation at any specific location where the Statewide registration is not valid.
9. This registration is not valid for operation of generators used to provide power into the grid, except during an emergency event or other unforeseen event that affects grid stability.
10. This registration is not valid for operation of generators used to provide primary or supplemental power to a building, facility, stationary source, or stationary equipment except during the following scenarios: unforeseen interruptions of power from the serving utility; maintenance and repair operations; and electrical upgrade operations that do not exceed 60 calendar days.
11. This registration is not valid for operation within the boundaries of the California Outer Continental Shelf and State Territorial Waters.
12. The portable engine shall not be operated under both statewide registration and a district permit at any specific location.
13. This registration is not valid for operation of an engine that powers an equipment unit that has been determined by the Air Resources Board to qualify as part of a stationary source permitted by a district.

The following operating conditions apply for registration # 143161
Engine Serial # : SYC00933

14. Except for engines owned by a rental business, the owner/operator of this engine shall contact the local air district prior to operation at an agricultural source.
15. For each rental engine or an engine used in a third party rental transaction, a written copy of the rental agreement or a completed Form 10 must be kept onsite at all times.

Emission Limitation

16. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann 1 or equivalent to 20% opacity.

Recordkeeping

17. For a rental engine or an engine that is part of a third party rental transaction, the rental business shall provide a written log for recordkeeping purposes which is to be kept with the rental engine at all times. The rental business shall keep records of the registration number of the engine; date of the start and end of the rental transaction; and written (signed) acknowledgment by each renter of having received the registration certificate and operating conditions. The written log shall be maintained on an annual basis and previous annual logs shall be maintained at a central location for a minimum of five years, and made accessible to the Air Resources Board or districts upon request.
18. While the engine is out on rent, the rental customer shall record no less than once a month the specific location of the engine (i.e. street address and city; or county and UTM coordinates; or other location indicator) in the written log provided by the owner.
19. For non-rental engines, the operator shall record the registration number and specific location of the engine (i.e. street address and city; or county and UTM coordinates; or other location indicator) no less than once a month.
20. All records shall be maintained at a central place of business for a minimum of five years, and made accessible to the Air Resources Board or district representative upon request.

Reporting & Notification

21. Within 5 days of a rental transaction exceeding 9 months in duration, a rental business or the owner of a registered engine involved in a third party rental shall submit written notification of the rental transaction to the district in which the rental business is located. The notification shall include the engine registration number, the rental customer telephone number and mailing address, and estimated location of the registered engine.

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22. When this engine is sold, the new owner shall submit a change of ownership application within 30 days of the change in ownership. If an application is not received within 30 days of the ownership change, the existing registration is not valid for the new owner until the application has been filed and all applicable fees have been paid.
23. The owner of a registered portable engine shall notify the Executive Officer in writing within five days of replacing the registered portable engine with an identical replacement. The notification shall include company name, the responsible official, phone number, registration number, make, model, rated brake horsepower, and serial number of the identical replacement, description of the mechanical breakdown, and applicable fees.

Fleet Average Requirements

24. Except for low-use engines and engines used exclusively in emergency applications, for engines greater than 750 bhp, a weighted fleet average PM emission factor of 0.25 g/bhp-hr shall be met by **January 1, 2013**, 0.08 g/bhp-hr shall be met by **January 1, 2017**, and 0.02 g/bhp-hr shall be met by **January 1, 2020.** Changes in the fleet, including engine additions and deletions, shall not result in noncompliance with this standard.
25. The weighted fleet average PM emission factor shall be calculated by taking the summation of the emission factor for each engine in the fleet multiplied by the bhp rating for each engine and then dividing that summation by the summation of the bhp ratings for all the engines in the fleet.
26. The weighted fleet average PM emission factor calculation shall use the test results from nonroad emission standard certification, test results from a verified emission control strategy as defined in Title 13 of the California Code of Regulations Section 93116.2, or the test results from a SCR system. All test results shall be made available to the Air Resources Board upon request.
27. Where equipment uses grid power for more than 200 hours in lieu of operating a portable diesel engine for a given project, the time period grid power is used may be used to reduce each affected engine's emission factor. The emission factor for each affected portable engine shall be reduced proportionally by the percentage of time the equipment uses grid power.
28. The weighted fleet average PM emission factor shall include all portable engines, including those permitted or registered with a local air district, that are owned and managed by an individual operational entity, such as a business, business unit within a corporation, or individual city or state department under the control of a Responsible Official. Engines that are owned by different business entities that are under the common control of only one Responsible Official shall be treated as a single fleet.

The following operating conditions apply for registration # 143161
Engine Serial # : SYC00933

29. If certified non-diesel fueled engines are part of your fleet and have been operating 100 or more hours, they may be included toward determining compliance with the applicable fleet emission standards. A diesel PM emission rate of zero shall be used in the fleet calculations for these engines. If the engine was added to the fleet prior to January 1, 2009 , it may be counted twice in the company's fleet average determination toward compliance with the 2013 and 2017 fleet emission standards.
30. Portable diesel-fueled engines certified to Tier 4 nonroad engine standards that are added to a fleet prior to January 1, 2015, may be counted twice in the company's fleet average determination toward compliance with the 2013 and 2017 fleet emission standards.

Fleet Recordkeeping

31. Starting January 1, 2012, the responsible official of a fleet shall keep records of annual operating hours for non-diesel fueled portable engines used as part of a company's fleet average, engines affected by the use of electrification, low-use engines, and engines used exclusively in emergency applications.
32. All records pertaining to the fleet average shall be maintained at a central place of business for a minimum of five years, and made accessible to the Air Resources Board or district representative upon request.

Fleet Reporting and Notification

33. The Responsible Official of a fleet shall submit to the Air Resources Board by March 1, 2013, March 1, 2017, and March 1, 2020 a signed statement of compliance that the fleet standards are being achieved. The Statement of compliance shall include for each engine in the fleet: make, model, serial number, fuel type, PM emission factor (g/bhp-hr), and district permit or State registration number. If compliance with the fleet average includes the use of electrification, the Responsible Official shall provide documentation supporting the credit claimed for electrification.
34. As part of each statement of compliance, the Responsible Official shall, if applicable, certify that all alternative-fueled engines included in the fleet average operated at least 100 hours during the previous 12 months prior to the fleet emission standard becoming effective, for all engines exclusively used in emergency applications, the engines were used only for emergency applications, for all engines using the low-use designation, the engines operated no more than 80 hours for the reporting period, and for all portable diesel-fueled engines equipped with SCR, the engine complies with applicable district or Statewide Portable Equipment Registration Program requirements.

The following operating conditions apply for registration # 143161
Engine Serial # : SYC00933

35. The Responsible Official of a fleet electing to use electrification in determining the fleet average shall notify prior to the start of the project the Executive Officer of the dates, location of the project, and make, model, serial number, district permit or State registration number of the affected engines. In addition, the notification shall clearly identify the electrification activity, including indicating the amount of electricity used and the time period for the project.

Inspection Requirements

36. Within 45 days after initial issuance or renewal of a registration, the owner or operator shall contact the home district to arrange for inspection to be completed within one year of the initial registration or renewal date. If the engine is operating in a district other than the home district, the owner or operator may request the home district to arrange an inspection by that other district.
37. For the purposes of scheduling inspections of multiple engines in order to qualify for an inspection fee discount, the owner or operator shall submit, within 45 days of initial registration issuance date or by January 30 of each year for renewals, a letter of intent to the home district that shall include an engine list with registration numbers of those to be inspected.
38. The time for the arranged inspection shall be agreed upon in advance between the district and the company. To the extent that an arranged inspection does not fall within the district's normal workday, the district may charge for the off-hour time.
39. If an arranged inspection does not occur due to unforeseen circumstances, the inspection shall be rescheduled for no later than 90 days from the initially scheduled inspection.
40. If the engine is out of California for one year or more following initial registration or renewal, the engine shall be excused from having the arranged inspection provided that within 45 days after the date of initial registration or renewal, the owner sends a letter to the district containing the registration number and a statement that the registered engine or equipment unit is out of California for the one-year period. Upon the return of the engine to California, the owner shall arrange to have the engine inspected within 30 days.

Google earth

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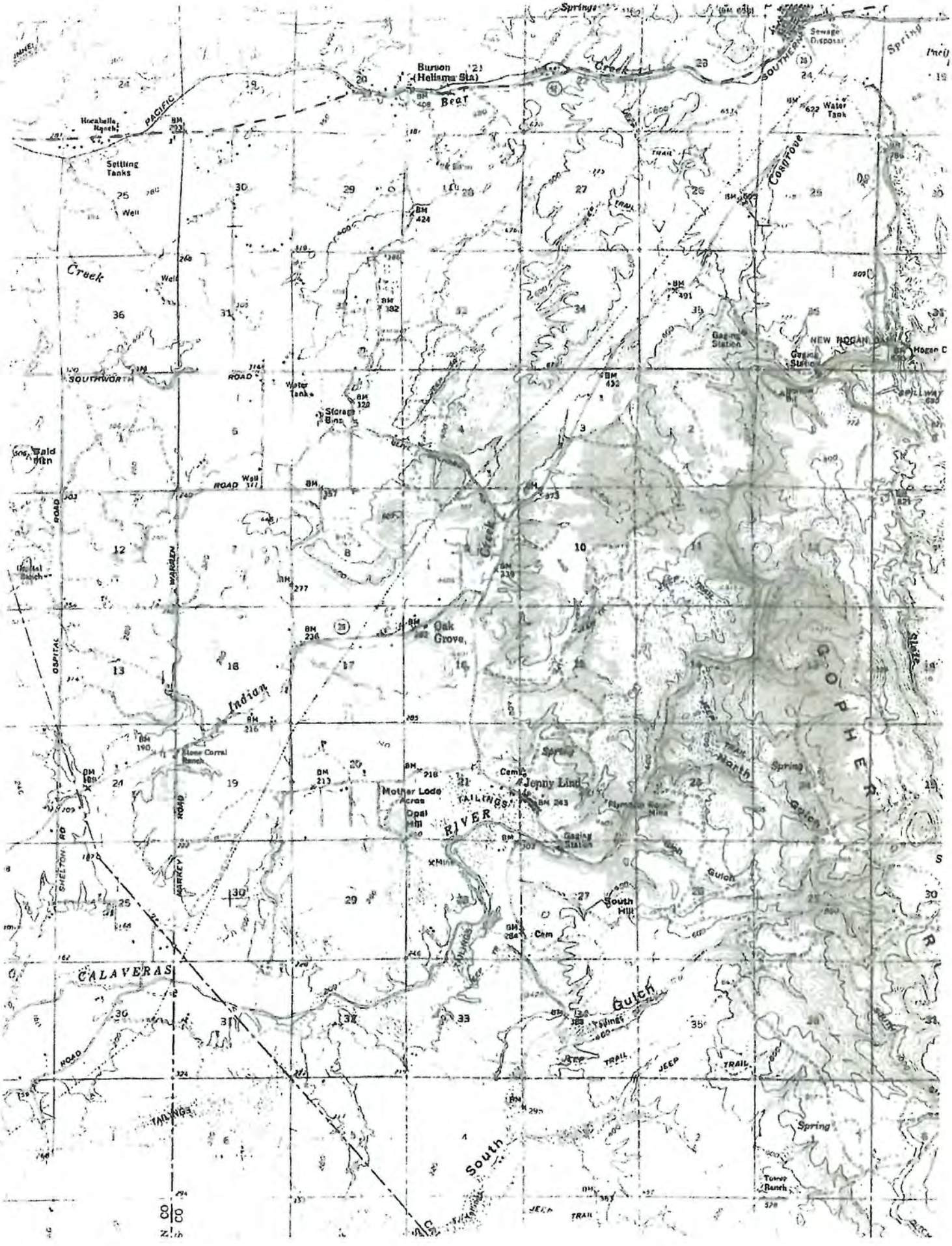
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Gasoline Station
SOUTHWORTH
ROAD
Water Tanks
Storage Bins
Well
Oak Grove
Indian
Creek
WARREN
ROAD
OSPITAL
Horse Corral Ranch
Mother Lode Acres
Opal Mine
Jenny Lind
TAILINGS
RIVER
Spring
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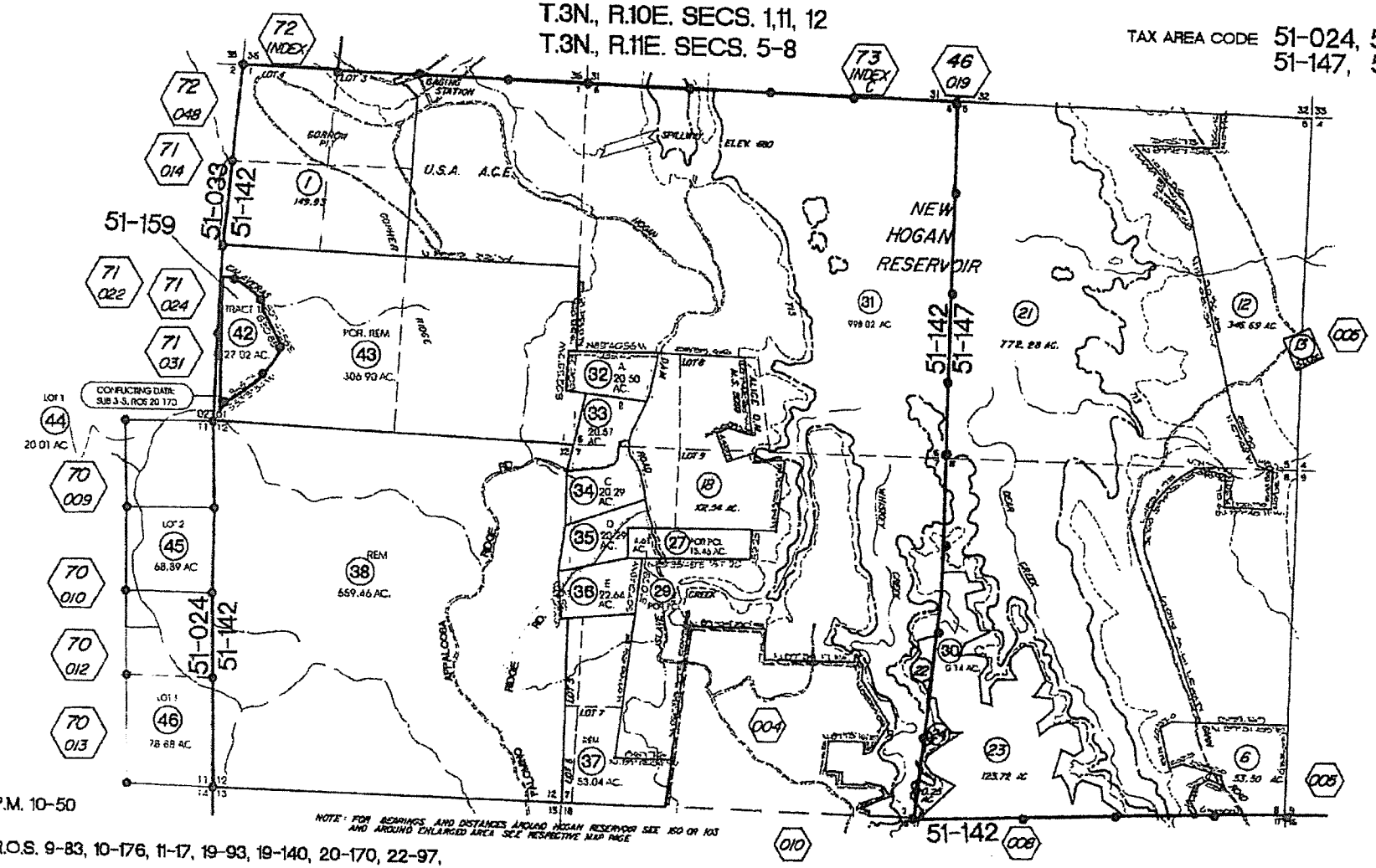
Gulch
South Hill
Cem
GOPHER
CALAVERAS
South
Gulch
JEEP
TRAIL
Tower Ranch

T.3N., R.10E. SECS. 1,11, 12
T.3N., R.11E. SECS. 5-8

TAX AREA CODE 51-024, 51-142, 51-147, 51-159 46



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R.O.S. 9-83, 10-176, 11-17, 19-93, 19-140, 20-170, 22-97,

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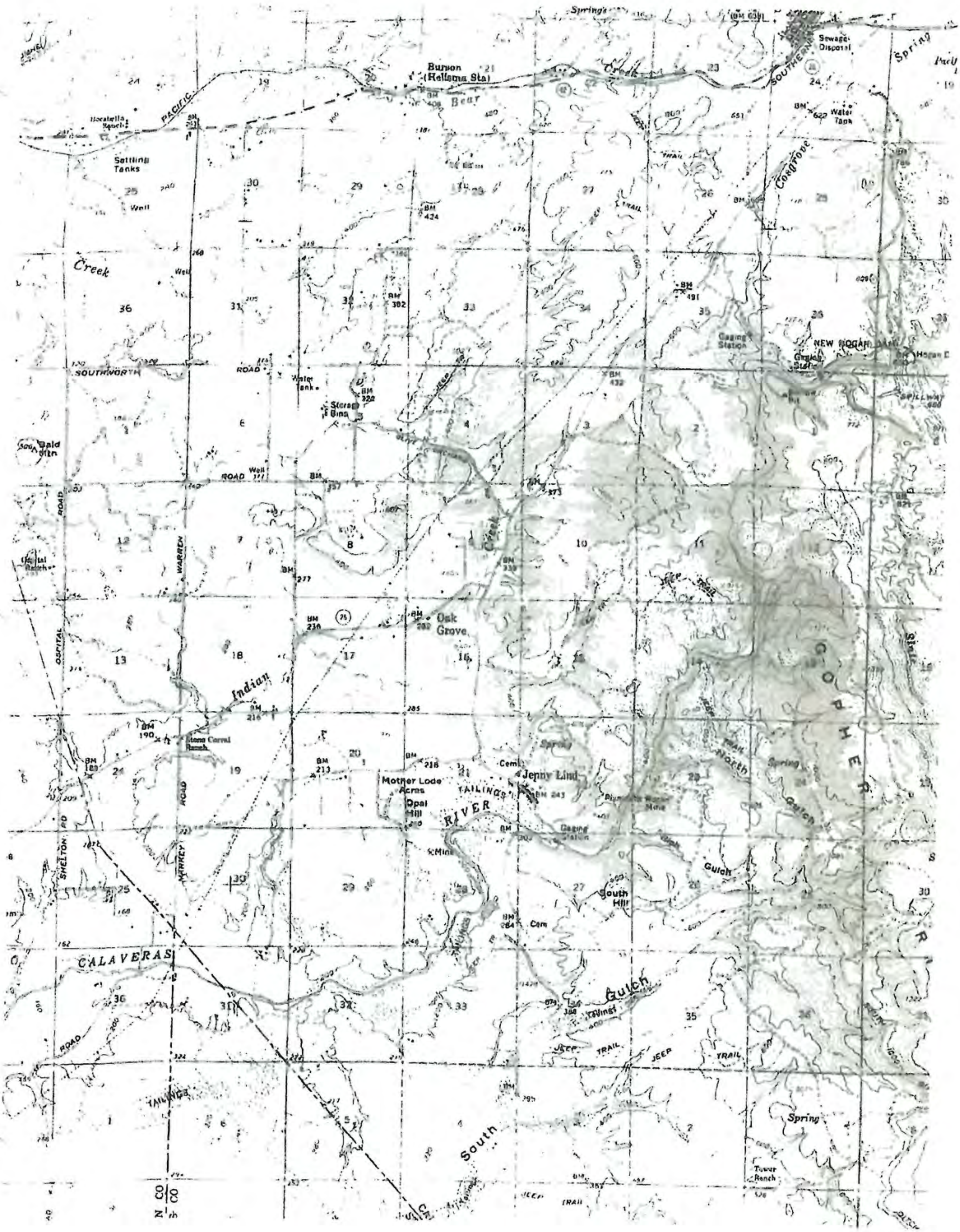
NOTE: FOR BEARINGS AND DISTANCES AROUND HOGAN RESERVOIR SEE 150 OR 103 AND AROUND ENLARGED AREA SEE RESPECTIVE MAP PAGE

ASSESSMENT PURPOSES ONLY
NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA DELINEATED HEREON

CALAVERAS COUNTY
ASSESSOR'S MAPS
BOOK 50 PAGE 003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NEW HOGAN DAM
SPILLWAY
Bald Mtn
WARREN
Creek
Oak Grove
Indian
Stone Corral Ranch
HOSPITAL
ROAD
JEEP TRAIL
GOPHER
Jenny Lind
Cem
Mother Lode Acres
Opal Hill
TAILINGS
RIVER
Gaging Station
North
Gulch
Spring
Mine
South Hill
SHELTON RD
YANKEY ROAD
CALAVERAS
Gulch
ROAD
TAILINGS
JEEP TRAIL
South
Spring
Tower Ranch