



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

CEQA INITIAL STUDY

CONAGRA FOODS PLANT MODERNIZATION AND EXPANSION PROJECT (PERMIT APPLICATION #20649)

June 2011

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INTRODUCTION TO THIS DOCUMENT

This document serves as the Initial Study (IS) for the ConAgra Foods Plant Modernization and Expansion project. The Negative Declaration that is supported by the findings of this Initial Study is attached. Per CEQA Guidelines (Section 15070), a Negative Declaration can be prepared to meet the requirements of CEQA review when the Initial Study shows on the basis of substantial evidence that the project would not have a significant effect on the environment.

This document is organized in three sections as follows:

- **Introduction and Project Summary.** This section introduces the document, provides a brief project description including location, setting, and provides contact information regarding the lead agency and project sponsor.
- **Findings.** This section includes the CEQA findings that would allow adoption of this document along with the Negative Declaration as the CEQA review document for the proposed project.
- **Environmental Checklist.** This section presents the checklist questions consistent with Appendix G of the CEQA Guidelines. Discussion and analysis that support the checked boxes are provided in the Discussion of Impacts and Environmental Analysis section.
- **Discussion of Impacts and Environmental Analysis.** This section includes a detailed project description and provides a discussion and analysis of potential environmental effects to explain and provide analytical support for the answers given in the Environmental Checklist and the Findings.

PUBLIC REVIEW

The Initial Study and Proposed Negative Declaration will be circulated for a 30-day public review period beginning June 20, 2011 and ending at 5:00 p.m. on July 20, 2011. Written comments may be submitted to the following address:

Jimmy Cheng, Air Quality Engineer II
Bay Area Air Quality Management District (BAAQMD)
939 Ellis Street
San Francisco, CA 94109
Telephone: 415-749-5022
Fax: 415-749-5030
jcheng@baaqmd.gov

Adoption of the Negative Declaration does not constitute approval of the project itself, which is a separate action to be taken by the Bay Area Air Quality Management District. Approval of the project can take place only after the Negative Declaration has been adopted.





PROJECT SUMMARY

- 1. Project Title:** Plant Modification and Expansion Project of the ConAgra Foods Flour Mill (BAAQMD Permit Application #20649)
- 2. Lead Agency Contact:** Jimmy Cheng, Air Quality Engineer II
Bay Area Air Quality Management District (BAAQMD)
939 Ellis Street
San Francisco, CA 94109
Tel: 415/749-5022
Fax: 415/749-5030
email: jcheng@baaqmd.gov
- 3. Project Contact:** Bart Hahlweg, Plant Manager
ConAgra Mills
2201 E 7th St
Oakland, CA 94606
Tel: 510.536.9555
Fax: 510.536.9593
email: bart.hahlweg@conagrafoods.com
- 4. Project Location:** 2201 E. 7th Street
Oakland, CA 94606
A.P.N. 019-71-1-6
- 5. General Plan Designation:** Estuary Plan Area (City of Oakland General Plan)
- 6. Zoning:** M-40/S-4 (Heavy Industrial; Site Design Review)
- 7. Summary of Project:** Permit Application for Permit to Operate; Modification to increase flour producing capacity of the A-Mill from the current 300 tons to 500 tons of flour per day.

8. Surrounding Land Uses and Setting.

The ConAgra site is located along the Oakland Estuary at the corner of East 7th Street and Kennedy Street in the San Antonio neighborhood of Oakland (**Figures 1, 2 and 3**). The 12.8-acre site has been in continuous operation milling flour since 1965, and currently consists of 101,000 square feet of buildings, including 71,000 square feet for manufacturing and 30,000 square feet for storage. The primary structures on the site include a series of interconnected silos capable of storing up to 1,000,000 bushels of raw grains and an adjacent mill building containing the A-Mill and the B-Mill. The buildings are served by an expansive parking area that supports in-coming and out-going rail cars, truck loading of processed flour products, truck parking, and a modular office complex for plant management.



The site is located in a heavy industrial area. Adjacent uses include a Cemex cement batching plant, Union Point Park, and a recreation boat service and sales operation. A gasoline dispensing facility is located across E. 7th Street. Union Pacific Railroad lines serve the site along the edge of the Oakland Estuary. The Nimitz freeway (I-880) is located approximately 700 feet east of the site. The Park Street Bridge connecting Oakland with the City of Alameda is located to the south of the site. The nearest residences are in a live-work building located approximately 400 feet east of the ConAgra facility at the corner of Kennedy Street and E. 7th Street in Oakland and residential houses located approximately 1,200 feet southwest of the facility at the corner of Clement Avenue and Elm Street in the city of Alameda. The nearest schools are Street Academy Senior High located approximately 700 feet east of the facility at the intersection of 23rd Avenue and 29th Avenue in Oakland, and Alameda Family Services preschool located approximately 1,200 feet south of the facility, at 2325 Clement Avenue in the city of Alameda.

9. Other public agencies whose approval is required None.



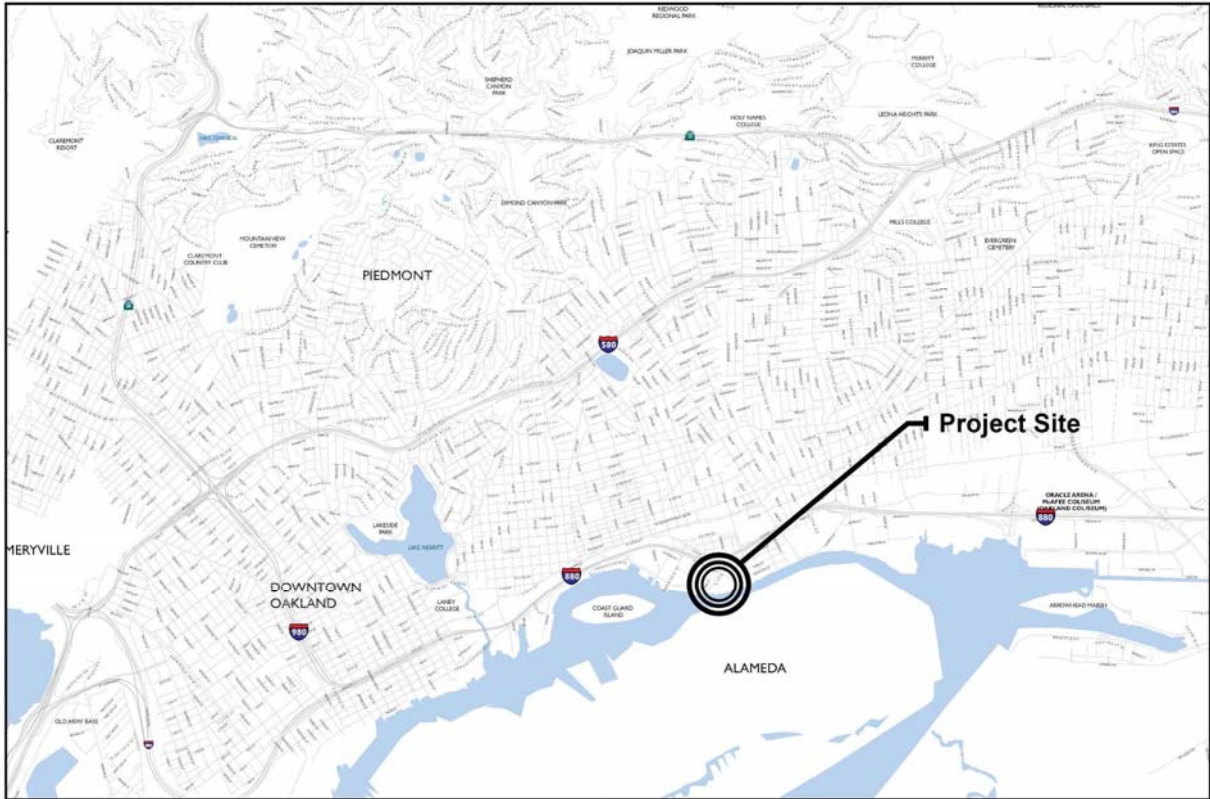


Figure 1 - Vicinity Map.



Figure 2 - Project Location.





Figure 3 - Project Site.



FINDINGS

PROJECT DESCRIPTION, LOCATION, AND SETTING

This Initial Study has been prepared for the ConAgra Foods Plant Modification and Expansion project. See the Introduction and project Description section of this document for details of the project.

POTENTIALLY SIGNIFICANT IMPACTS REQUIRING MITIGATION

The Initial Study has found no potentially significant environmental effects that would require mitigation. No mitigation measures are required. Refer to the Discussion of Environmental Impacts section of this document for the analysis of potential environmental effects.

PROPOSED FINDINGS

The report preparers, in consultation with staff of the Bay Area Air Quality Management District (BAAQMD) have determined that the proposed project will not have a significant effect on the environment. If a Negative Declaration is adopted by the BAAQMD, the requirements of the California Environmental Quality Act (CEQA) will be considered to have been met by the preparation of this Initial Study and the project will not require the preparation of an Environmental Impact Report. This decision is supported by the following findings:

- a. The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community. It does not reduce the number or restrict the range of a rare or endangered plant or animal. It does not eliminate important examples of the major periods of California history or pre-history, since there is no identified area at the project site which is habitat for rare or endangered species, or which represents unique examples of California history or prehistory. In addition, because of components of the project that are already being implemented, the project would result in lower air emissions and a lower level of health risk compared with 'business as usual' and as a result, would not cause any potentially significant or significant and unavoidable adverse impacts.
- b. The project does not involve impacts which are individually limited but cumulatively considerable, because the described project includes the use of upgraded diesel engines in the fleet of truck that transport processed flour products, resulting in lower diesel emissions compared with 'business as usual' conditions, thereby avoiding any increase in health risks or hazards.
- c. The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly, because potential impacts associated with air quality and greenhouse gas emissions will be reduced compared with 'business as usual' outcomes as a result of the project.





ENVIRONMENTAL CHECKLIST

Issues (and Supporting Information Sources):

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
1. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
2. AGRICULTURAL AND FOREST RESOURCES -- Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resource Agency, to non- agricultural use?				<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?				<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non forest use?				<input checked="" type="checkbox"/>



3. AIR QUALITY -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			<input checked="" type="checkbox"/>	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			<input checked="" type="checkbox"/>	
d) Expose sensitive receptors to substantial pollutant concentrations?			<input checked="" type="checkbox"/>	
e) Create objectionable odors affecting a substantial number of people?			<input checked="" type="checkbox"/>	



4. BIOLOGICAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?				☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				☒

5. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Public Resources Section 15064.5?				☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Section 15064.5?				☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				☒
d) Disturb any human remains, including those interred outside of formal cemeteries?				☒



6. ENERGY -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in a substantial increase in overall or per capita energy consumption?			<input checked="" type="checkbox"/>	
b) Increase reliance on natural gas and oil?				<input checked="" type="checkbox"/>
c) Result in wasteful or unnecessary consumption of energy?				<input checked="" type="checkbox"/>
d) Require or result in the construction of new sources of energy supplies or additional energy infrastructure capacity?				<input checked="" type="checkbox"/>
e) Comply with adopted energy efficiency standards?				<input checked="" type="checkbox"/>



7. GEOLOGY AND SOILS -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?				<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?				<input checked="" type="checkbox"/>
iv) Landslides?				<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?				<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				<input checked="" type="checkbox"/>

8. GREENHOUSE GASES -- Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			<input checked="" type="checkbox"/>	
b) Conflict with any applicable plan, policy or regulation of a District adopted for the purpose of reducing the emissions of greenhouse gases?				<input checked="" type="checkbox"/>



9. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				<input checked="" type="checkbox"/>



10. HYDROLOGY AND WATER QUALITY -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?				<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?				<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?				<input checked="" type="checkbox"/>



11. LAND USE AND PLANNING -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an District with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				<input checked="" type="checkbox"/>

12. MINERAL RESOURCES -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				<input checked="" type="checkbox"/>



13. NOISE -- Would the project result in:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		<input checked="" type="checkbox"/>		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		<input checked="" type="checkbox"/>		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		<input checked="" type="checkbox"/>		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels?				<input checked="" type="checkbox"/>
f) For a project in the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels?				<input checked="" type="checkbox"/>

14. POPULATION AND HOUSING -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				<input checked="" type="checkbox"/>



15. PUBLIC SERVICES -- Would the project:

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services?

- | | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|-----------------------------|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| i. Fire protection. | | | | <input checked="" type="checkbox"/> |
| ii. Police protection. | | | | <input checked="" type="checkbox"/> |
| iii. Schools. | | | | <input checked="" type="checkbox"/> |
| iv. Parks. | | | | <input checked="" type="checkbox"/> |
| v. Other public facilities. | | | | <input checked="" type="checkbox"/> |

16. RECREATION -- Would the project:

- | | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|-------------------------------------|-----------|
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | <input checked="" type="checkbox"/> | |
| b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | | | <input checked="" type="checkbox"/> | |

17. TRANSPORTATION -- Would the project:

- | | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non- | | | | <input checked="" type="checkbox"/> |



17. TRANSPORTATION -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?				<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				<input checked="" type="checkbox"/>

18. UTILITIES AND SERVICE SYSTEMS -- Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?				<input checked="" type="checkbox"/>



19. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				<input checked="" type="checkbox"/>



DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, an EIR Addendum is required.



Jimmy Cheng,
Air Quality Engineer II

6/16/11

Date

Reviewed by:



Brian Bateman
Director of Engineering Division

6/16/11

Date





Discussion Of Environmental Impacts

PROJECT DESCRIPTION

Background

ConAgra Food Ingredients Company, a division of ConAgra Foods (“ConAgra”, or “the applicant”) operates a flour milling facility on a 12.8-acre site located along the Oakland Estuary at the corner of East 7th Street and Kennedy Street in the San Antonio neighborhood of Oakland. This facility has been in continuous operation milling flour since 1965, and consists of 101,000 square feet of buildings including 71,000 square feet for manufacturing and 30,000 square feet for storage. The primary structures on the site include a series of interconnected silos capable of storing up to 1,000,000 bushels of raw grains and an adjacent mill building containing the A-Mill and the B-Mill. The buildings are served by an expansive parking area that supports in-coming and out-going rail cars, truck loading of processed flour products, truck parking, and a modular office complex for plant management. The location of the facility is presented in **Figures 1, 2 and 3**.

The ConAgra site is located in an area that is in heavy industrial use generally, although it is adjacent to the parking area for Union Point Park. Other adjacent uses include a Cemex cement batching plant, and a recreation boat service and sales operation. A gasoline dispensing facility is located across E. 7th Street. Union Pacific Railroad lines serve the site along the edge of the Oakland Estuary.

ConAgra proposes a modernization project for its flour milling facility that consists of three elements:

- (1) the replacement or modification of certain pieces of facility equipment;
- (2) an increase in the throughput limits in the BAAQMD permit, and
- (3) upgrades and idling restrictions for the truck fleet that serves the facility.

ConAgra proposes a modernization of the A-Mill to increase flour production from 300 to 500 tons per day. (The capacity of the B-Mill is 200 tons of flour per day, and would remain unchanged.) ConAgra has applied to the BAAQMD for permits to replace much of the process equipment and baghouse filters in the existing A-Mill milling operation with new equipment and filters. Additionally, the A-Mill cleaning operation will include an additional cleaning device and two additional filters. This increase in capacity of the milling equipment will result in increases in other, related process equipment – both upstream and downstream from the milling operation. The BAAQMD permit application also proposes to increase the throughput limit for the wheat handling operation to account for the fact that wheat may be lifted four times before being milled.

The facility currently has a Synthetic Minor Operating Permit. A Synthetic Minor Facility is a facility which, by imposition of enforceable permit conditions, has its potential to emit limited to below the threshold levels for a major facility as defined by Section 2-6-212 and is not otherwise required to apply for a major facility review permit under Regulation 2, Rule 6. A Synthetic Minor Operating Permit is a District operating permit that has been modified to include conditions imposing enforceable permit conditions on a facility or source. A Synthetic Minor Operating Permit is subject to all the provisions of District Regulations 1, 2, and 3, including, but not limited to, permitting, compliance, and fee requirements. This project includes changes to facility equipment that will increase emissions from milling equipment. The proposed facility PM₁₀ emissions will continue to be less than the Synthetic Minor threshold.



The facility's grain storage capacity is less than one million bushels; therefore, it is not subject to the federal New Source Performance Standards (NSPS), Subpart DD- Standards for Performance of Grain Elevators. NSPS, Subpart DD applies to each affected facility at any grain terminal elevator or any grain storage elevator. Affected facilities include truck loading/unloading stations, railcar loading/unloading stations, grain dryers, and all grain handling operations.

Proposed Modifications to Permitted Operations

The A-Mill modernization would upgrade and expand the original 300 ton/day flour milling unit into a modern 500 ton/day flour milling unit using the latest flour milling technology. The new equipment would replace existing equipment within the existing structures at the site, and would result in a total mill capacity increase from the current 500 tons/day to 700 tons/day (a 40 percent increase). Benefits associated with the proposed modifications include improving milling yield at the A-Mill by 2.5 percent, and eliminating the need to ship in flour from other locations for distribution to customers in the San Francisco Bay Area (approximately 60 percent of the facility's customers and 90 percent of its bulk flour business are within a 25-mile radius of the facility). As part of the project, ConAgra is upgrading the fleet of diesel trucks that transport processed flour products to downstream vendors in order to reduce diesel emissions.

The current Permit to Operate (PO) for the A-Mill was issued by the BAAQMD on May 13, 2010. In order to maintain its status as a Synthetic Minor Facility per Regulations 2-6-230 and 2-6-423, the facility accepted federally enforceable throughput limits in the current PO ensure that that the facility-wide Potential To Emit is comfortably below the thresholds in Regulation 2-6-423.2.1 of 95 tons per year of any regulated air pollutant, 9 tons per year of any hazardous air pollutant (HAP), and 23 tons per year of any combination of HAPs. .

On May 4, 2009, ConAgra submitted a permit application to the BAAQMD to expand the A-Mill at the ConAgra flour mill in Oakland.

The new process equipment would include:

- A-Mill Cleaning Equipment. This would include the addition of a second Combinatory. This would remain S2, and emissions at S2 would be reduced.
- A-Mill Milling Equipment. This would include replacement of the existing roller mills, replacement of existing filters, and the addition of one purifier. ConAgra proposes that this source be numbered S41. This would replace existing source S3.

There will be several new baghouse filters. These are listed in **Table 1** below, along with proposed abatement equipment numbers.



Table 1. ConAgra A-Mill Filter Replacement

Existing Filter(s) to be Replaced	Capacity (CFM)	Proposed New Filter	Name	Description
A4, A5, A7, A8	4800 (each)	A41	Cleaning House Filter	14,800 dscfm abating S2 (A-Mill Wheat Cleaning)
A10, A11	4800 (each)	A42	General Aspiration Filter	14,800 dscfm abating S41 (A-Mill Wheat Milling)
A12, A13	4800 (each)	A43	Pneumatics 1 Filter	14,800 dscfm abating S41 (A-Mill Wheat Milling)
A14, A15	4800 (each)	A44	Pneumatics 2 Filter	14,800 dscfm abating S41 (A-Mill Wheat Milling)
A16, A23, A101	4800, 625, 8000	A45	Blend Plant Filter	14,800 dscfm abating S41 (A-Mill Wheat Milling), (Flour Storing and Blending), S4 (Flour Storage & Blend Plant) and S12 (Flour Rail Receiving System)

Note: Filters A4, A5, A7, A8, A16, A23 and A101 are being replaced currently under a Permit already issued; Filters A10 – A-15 would be replaced upon approval of the Amended Permit for which this Initial Study is being prepared.

A phased equipment replacement is proposed for this project. During the replacement period, some of the existing process and abatement equipment will be operated with proposed process abatement equipment. In all cases, there would be no emissions from the A-Mill Cleaning Operation or from the A-Mill Milling equipment that would be emitted directly to the atmosphere. All emissions would be controlled by a baghouse filter.

New proposed A-Mill throughput limits are presented in **Table 2** below.

Table 2. ConAgra A-Mill Equipment Throughput Limits

S Number	Name	Current Throughput Limit*	Proposed Throughput Limit*
1	Wheat Conveying	336,000	1,720,000
2	A-Mill Cleaning	336,000	280,000
4	Flour Storage & Blending	226,000	360,000
8, 9, 10, 11	Flour Loadout	226,430	360,000
12	Flour Receiving	100,000	100,000
13	Feed Loadout	99,000	99,000
14	Wheat Receiving/Shipping	336,000	430,000
16	B-Mill Cleaning	150,000	120,000
19	Wheat Conveying (Headhouse)	550,000	1,720,000

*tons/any consecutive 12 months.



Operational Improvements to Prevent Potential Air Quality Impacts

The proposed project includes two operational measures undertaken by ConAgra to ensure that local and/or cumulative levels of criteria air pollutants (CAP) and emissions of fine particulate matter (PM_{2.5}) remain at or below existing levels. These two measures are:

- a) Upgrading diesel-powered haul trucks for bulk deliveries to model year 2011 or newer, thereby reducing diesel particulate matter (DPM) emissions in advance of when such improvements would otherwise be required; and
- b) Enforcing a 5-minute idling restriction on all diesel-powered bulk trucks while on the ConAgra site.

These operational measures are being implemented by ConAgra in advance of the issuance of the Operating Permit. Accordingly, the Air Quality analysis presented in the body of this Initial Study assumes that these two measures are part of the project. As part of Permit Application 20649, BAAQMD will include enforceable permit conditions to ensure that these two operational measures are followed.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) requires environmental review for projects developed or approved by State, regional, or local governments in California. ConAgra has submitted to the BAAQMD a permit application to approve modifying conditions to an existing PO. This Permit Application does not qualify under any CEQA exemptions contained in BAAQMD Regulation 2-1-311 (ministerial exemption), Regulation 2-1-312 (categorical exemption), or Section 15061 of the State CEQA Guidelines. The BAAQMD is not aware of any other public agency that would be preparing a Negative Declaration or EIR for this project. Accordingly, the BAAQMD is the Lead Agency for this project under CEQA.

The BAAQMD has received from the applicant a completed preliminary environmental study, as required by Regulation 2-1-426.1, with information equivalent to that contained in Appendix H of the State CEQA Guidelines (Environmental Information Form).



Environmental Impacts

The following sections provide additional detail about why the particular items in the preceding CEQA checklist were checked.

1. AESTHETICS

As all proposed A-Mill equipment modifications would be made within existing structures at the site, there would be no physical change in the external appearance of the site, and, thus, no potential for future obstructions to a scenic view or alterations to the light or glare generated from the facility due to the proposed modifications. With all proposed A-Mill equipment modifications limited to the interior of existing structures, there would be no visible changes at the site and no change in scenic views or vistas from adjacent industrial areas, public lands (i.e., Union Point Park) or roadways due to the project. Additionally, there would be no changes in the existing levels of dust, ash, smoke, fumes or odors in the vicinity as a result of the proposed equipment modifications. Thus, no new aesthetic impacts are anticipated with approval of the proposed project.

2. AGRICULTURAL AND FOREST RESOURCES

Neither the continued operation of the facility nor the approval of the proposed project would result in any construction outside of existing facilities, which are located in a heavy industrial urban area. Thus, no impacts to agriculture or forest resources are anticipated.

3. AIR QUALITY

ENVIRON International Corporation (ENVIRON) conducted analyses of greenhouse gases (GHGs), criteria air pollutants and precursors (CAPs), and local risk and hazard impacts estimated to be generated due to the proposed A-Mill modernization project. ENVIRON followed CEQA Guidelines¹ issued by the BAAQMD in June 2010 to determine whether the emissions associated with the proposed project would be below thresholds of significance listed in the Guidelines under a screening analysis, and in some instances, a more refined analysis. A project's impact on air quality is considered significant if it exceeds the significance thresholds.

Summary of Air Quality Effects

The project will result in increases in annual (operational-related) emissions from stationary sources at the facility (e.g., "A" milling line) and decreases from mobile sources (e.g., trucks and trains for material transport), and increases from indirect GHG emissions associated with electricity used for operation of equipment. ENVIRON's conservative analyses indicate that the proposed project would not exceed the thresholds of significance in the categories which are applicable to the project. **Table 3** provides a summary of the incremental construction and operational-related GHG and CAP emissions and related parameters and local community risk and hazard impacts.

¹ BAAQMD, California Environmental Quality Act Air Quality Guidelines, June 2010. Available online at: http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_June%202010.ashx, accessed August 2010.



Table 3. Summary of Air Quality/GHG Results

Parameter	Project	Threshold (d)	Exceeds Threshold?	Units
Operation Related GHGs (a)	420	1,100 and 10,000	No	MT CO ₂ e/yr
Operational-related criteria pollutants and precursors (b)				
ROG	-0.1	10	No	tons/year
	-0.5	54	No	pounds/day
NO _x	-1.8	10	No	tons/year
	-1.0	54	No	pounds/day
PM _{10(c)}	3.28	15	No	tons/year
	18	82	No	pounds/day
PM _{2.5}	-0.1	10	No	tons/year
	-0.4	54	No	pounds/day
<u>Risk Hazards(c):</u>				
Cancer risk due to diesel particulate matter emissions from on-site truck and train traffic	-1 x 10 ⁻⁶	1 x 10 ⁻⁵	No	
Chronic Hazard Quotient (HQ) due to diesel particulate matter emissions from on-site truck and train traffic	-0.0004	1.0	No	
PM_{2.5} Concentration	-0.0016	0.3	No	µg/m ³

Notes:

- (a) Greenhouse gases (GHGs) from increased electricity demand and mobile sources.
- (b) Changes in facility specific traffic volumes were supplied by ConAgra.
- (c) Onsite stationary source emissions (from increase flour production on “A” milling line) taken from Bay Area Air Quality Management District (BAAQMD) Engineering Evaluation of proposed process modification (Permit Application 20649), dated February 2010.
- (d) Thresholds specified in June 2010 BAAQMD California Environmental Quality Act (CEQA) Guidelines. The Threshold of 1,100 MT CO₂e/yr is for indirect emissions resulting from land development projects and 10,000 MT CO₂e/yr is the threshold for direct emissions from stationary source projects. In this case, there would be no direct emissions; indirect emissions resulting from electricity use, vehicle trips, deliveries, etc., are less than the indirect emissions threshold.

Abbreviations:

CO₂e = carbon dioxide equivalent

GHGs = greenhouse gases

µg/m³ = microgram per cubic meter

MT = metric tons or tonnes (1 MT = 1 tonne = 2,205 pounds)

NO_x = oxides of nitrogen

PM₁₀ = particulate matter with aerodynamic resistance diameters not exceeding 10 micrometers



PM_{2.5} = particulate matter with aerodynamic resistance diameters not exceeding 2.5 micrometers

ROG = reactive organic gases

tpy = short tons per year = 2,000 pounds per year

Criteria Air Pollutants and Precursors

The operational-related CAP emissions of the project would be due to process emissions associated with increased throughput on the “A” flour milling line and on-road (trucks) and off-road (trains) mobile sources associated with increased material transport.

Emissions associated with the increased throughput of flour through modifications the “A” milling line were estimated by the BAAQMD in their draft Engineering Evaluation for Permit Application 20649, dated February 2010. As part of their evaluation, the District estimated the total plant cumulative increase in emissions of particulate matter (PM₁₀)⁷ to be 3.28 tons per year.

Truck traffic to and from the facility for both delivery of raw materials and delivery of finished product were calculated by ConAgra and supplied to ENVIRON (**Table 4**). ConAgra currently contracts with a trucking operator for bulk flour delivery to customers in the Bay Area, which account for at least 75 percent of the total flour shipments. For these bulk shipments, and as part of ConAgra’s Plant Modernization and Expansion project, ConAgra has required the current trucking company to use a dedicated fleet for these shipments consisting of 2011 model-year trucks. Emission factors for reactive organic gases (ROG), NO_x, and particulate matter (both PM₁₀ and PM_{2.5})² from the on-road mobile sources were computed using the California Air Resources Board (ARB) Emissions Factor Model (EMFAC) for heavy heavy-duty trucks (HHDT) in Alameda County. The remaining 25 percent of the flour shipments and other types of truck trips are operated by third-party carriers or customer trucks outside of the facility’s operational control. For modeling purposes, these trucks were assumed to be the Alameda County average fleet mix from EMFAC for 2010 (baseline) and 2013 (project).

² PM₁₀ and PM_{2.5} refer to particulate matter with aerodynamic resistance diameters not exceeding 10 micrometers and 2.5 micrometers, respectively.



Table 4. Mobile Source Vehicle Miles Traveled (VMT) Estimates

Year ^(a)	Type of Truck Trips	No. of Trips	Trip Travel Distance	VMT
2010	Wheat Deliveries	2,881	40	115,234
	Intermill Shipments	406	40	16,226
	Feed Shipments	1,881	46	86,505
	Flour Shipments	6,702	26.5	177,615
	Total Trips	11,870		395,581
2013	Wheat Deliveries	3,585	40	143,386
	Intermill Shipments	0	NA	0
	Feed Shipments	2,319	46	106,665
	Flour Shipments	7,452	26.5	197,490
	Total Trips	13,356		447,541

Notes:

(a) Year 2010 operations reflect fiscal year 2010, which runs from June 2009 through May 2010, and is assumed to be the baseline year. Year 2013 operations are representative of emissions associated with the completion of the project.

Abbreviations:

NA = not applicable

VMT = vehicle miles traveled

Emission data for trucks were calculated using the EMFAC model and were combined with activity information on the trucks delivering raw materials to the mill and delivering finished product from the facility to customers. The calculations for CAP emissions due to trucks are provided in **Tables 5a** and **5b**. Note that despite the increase in VMT, the emissions decrease due to emissions-related improvements of the county fleet between 2010 and 2013 and the use of 2011 model-year trucks for bulk deliveries.

In order to calculate the CAP emissions due to trains, emission factors based on estimates for EMD 16-645E Locomotive Model in United States Environmental Protection (USEPA) 1997 Locomotive Emissions Final Rulemaking were used. The emission factors from the USEPA were combined with activity data provided by ConAgra. The project does not exceed the significance thresholds for any of the CAPs. EMFAC results are shown in **Appendix A**.

Table 5a. Local Criteria Air Pollutants (CAP) Emissions from On-road Mobile Sources

Year ^(a)	Number of Trucks	Travel Distance (Miles)	VMT	NO _x (tons/yr)	ROG (tons/yr)	PM ₁₀ (tons/yr)	PM _{2.5} (tons/yr)
2010	11,870	0.47	5,603	0.09	7.5E-3	3.5E-3	3.0E-3
2013	13,356	0.47	6,304	0.06	6.0E-3	2.0E-3	2.0E-3



Table 5b. Basin Criteria Air Pollutants (CAP) Emissions from On-road Mobile Sources

Year ^(a)	Number of Trucks	Travel Distance (Miles)	VMT	NO _x (tons/yr)	ROG (tons/yr)	PM ₁₀ (tons/yr)	PM _{2.5} (tons/yr)
2010	11,870	33.3	395,581	6.2	0.52	0.24	0.21
2013	13,356	33.5	447,541	4.4	0.43	0.15	0.14

Notes:

(a) Year 2010 operations reflect fiscal year 2010 which runs from June 2009 through May 2010 and is assume to be the baseline year. Year 2013 operations are representative of emissions associated with the completion of the project.

Abbreviations:

tons/yr = tons per year

NO_x = oxides of nitrogen

PM₁₀ = particulate matter with aerodynamic resistance diameters not exceeding 10 micrometers

PM_{2.5} = particulate matter with aerodynamic resistance diameters not exceeding 2.5 micrometers

ROG = reactive organic gases

VMT = vehicle miles traveled

Local Community Risk and Hazard Impacts

A screening level human health risk assessment (HRA) was completed for the project to estimate the potential health impacts associated with the incremental DPM emissions from trucks and trains arriving and departing from the facility. The HRA estimates potential excess lifetime cancer risks, chronic noncancer hazard indices (HIs), and PM_{2.5} concentrations attributable to operational emissions at nearby residential live-work units located in Oakland on the southeast corner of Kennedy and East 7th Streets, east of the facility.³ These estimates were then compared to CEQA thresholds established by the BAAQMD as follows:

- An excess lifetime cancer risk level of more than 10 in one million;
- A noncancer (i.e., chronic or acute) HI greater than 1.0, and
- An incremental increase in the annual average PM_{2.5} or greater than 0.3 micrograms per cubic meter (µg/m³).

The primary exposure pathway identified for the potentially exposed populations within the vicinity of the facility is inhalation. Non-inhalation pathways were considered in accordance with BAAQMD and Cal/EPA guidance.^{4,5}

³ The other nearby residential area located approximately 1,200 feet southwest of the facility at the corner of Clement Avenue and Elm Street in the city of Alameda is much further away. Therefore residents at that location are not likely exposed to higher concentrations and risks.

⁴ BAAQMD. Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines. January 2010.



In accordance with BAAQMD CEQA guidance, a screening level atmospheric model, the USEPA’s SCREEN3 model, was used to estimate incremental concentrations of DPM and PM_{2.5} in the vicinity of the facility. A unit emission rate (e.g., 1 g/s-m²) was used in the SCREEN3 models and the actual DPM/PM_{2.5} emission rate was applied to the model results to obtain DPM/PM_{2.5} concentrations. The modeled DPM concentrations for trucks and trains are shown in **Table 6** and **Table 7**, respectively. **Table 8** shows the incremental PM_{2.5} concentrations associated with truck and locomotive activities related to the project. The output of the SCREEN3 simulation is provided in **Appendix B**.

Table 6. Incremental Excess Lifetime Cancer Risk and Chronic Hazard Quotient (HQ) Due to Diesel Particulate Matter (DPM) Emissions from Truck Traffic

Year ^(a)	On Nearby Street			On Facility			Street + Facility	
	Concentration µg/m ³	Cancer Risk	HQ	Concentration µg/m ³	Cancer Risk	HQ	Cancer Risk	HQ
2010	0.0057	3.1x10 ⁻⁶	0.0011	0.0019	1.0x10 ⁻⁶	0.00037	4.1x10 ⁻⁶	0.0015
2013	0.0035	1.9x10 ⁻⁶	0.0007	0.0012	6.3x10 ⁻⁷	0.00023	2.5x10 ⁻⁶	0.0009
Increment							-1.5x10⁻⁶	-0.0006

Notes:

- (a) Year 2010 operations are representative of emissions associated with the baseline year. Year 2013 operations are representative of emissions associated with the completion of the project, and include the 2011 mode- year truck fleet for bulk deliveries.
- (b) As shown in Appendix B, trucks on nearby streets were modeled using an area source of 10 meters wide by 100 meters long (to approximate the dimensions of the street), where the maximum concentration was reported at 70 meters from the source.
- (c) As shown in Appendix B, trucks on the facility streets were modeled using an area source of 75 meters wide by 150 meters long, where the maximum concentration was reported at 110 meters from the source.
- (d) The maximum reported concentrations from both the “on nearby street” trucks (at 70 meters from the source) and “on facility” trucks (at 110 meters from the source) were added together to conservatively estimate the maximum concentration, and, therefore, risks and hazards.

Abbreviations:

µg/m³ = microgram per cubic meter

HQ = hazard quotient

⁵ Cal/EPA. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Office of Environmental Health Hazard Assessment. August 2003.



Table 7. Incremental Excess Lifetime Cancer Risk and Chronic Hazard Quotient (HQ) Due to Diesel Particulate Matter (DPM) Emissions from Locomotive Deliveries

Year ^(a)	Cars	Switches ^(b)	Hours/Year Switching ^(c)	Emission Rate g/hr ^(d)	Concentration µg/m ³	Cancer Risk	HQ
2010	1,167	77.8	38.9	38	0.0037	2.0x10 ⁻⁶	0.00073
2013	1,452	96.8	48.4	38	0.0045	2.5x10 ⁻⁶	0.00091
Increment						5x10⁻⁷	0.00018

Notes:

- (a) Year 2010 operations are representative of emissions associated with the baseline year. Year 2013 operations are representative of emissions associated with the completion of the project.
- (b) Assumed 15 cars per switch, based on communication from ConAgra.
- (c) Time per switch = 0.5 hours, based on information provided by ConAgra.
- (d) PM2.5 Emission Factor = 38 grams per hour (g/hr), based on the GP-3X Locomotive Model Group in California Air Resources Board, 2004. Roseville Rail Yard Study.

Abbreviations:

µg/m³ = microgram per cubic meter
g/hr = gram per hour
HQ = hazard quotient

Table 8. Incremental Fine Particulate Matter (PM2.5) Concentrations from Truck Traffic and Locomotive Deliveries

Year ^(a)	Maximum Truck Concentration µg/m ³	Maximum Locomotive Concentration µg/m ³	Maximum Total Concentration µg/m ³
2010	0.0069	0.0037	0.0106
2013	0.0045	0.0045	0.0090
Increment			-0.0016

Notes:

- (a) Year 2010 operations are representative of emissions associated with the baseline year. Year 2013 operations are representative of emissions associated with the completion of the project.

Abbreviations:

µg/m³ = microgram per cubic meter



Default exposure assumptions prescribed by the BAAQMD were used in this HRA. Residents were assumed to be at their residence 24 hours per day, 350 days per year for 70 years^{6, 7}. The default inhalation rate of 302 L/kg-day was assumed for residents.⁸

The intake factor for inhalation, IF_{inh} , can be calculated as follows:

$$IF_{inh} = \frac{DBR \times EF \times ED \times CF}{AT}$$

Where:

- IF_{inh} = Intake Factor for Inhalation (m^3 /kilogram bodyweight per day [kg-day])
- DBR = Daily Breathing Rate (liter [L]/kg-day)
- EF = Exposure Frequency (days/year)
- ED = Exposure Duration (years)
- CF = Conversion Factor (m^3 /L)
- AT = Averaging Time (days)

Consistent with Cal/EPA risk assessment guidance, ENVIRON used a cancer potency factor (CPF) of 1.1 per milligram per kilogram per day ($mg/kg\text{-day}^{-1}$) and chronic reference exposure level (REL) of $5 \mu g/m^3$ for DPM.⁹ An acute REL for diesel exhaust has not been published by Cal/EPA.

The following equation was used to calculate excess lifetime cancer risk:

$$Risk_i = C_i \times CF \times IF_{inh} \times CPF_i \times ASF$$

Where:

- $Risk_i$ = Lifetime Excess Cancer Risk from exposure to chemical_i
- C_i = Annual Average Air Concentration for chemical_i ($\mu g/m^3$)
- CF = Conversion Factor ($mg/\mu g$)
- IF_{inh} = Intake Factor for Inhalation (m^3 /kg-day)
- CPF_i = Cancer Potency Factor for chemical_i ($mg/kg/day$)⁻¹
- ASF = Age Sensitivity Factor (unitless)

Consistent with BAAQMD Guidelines¹⁰, an age-sensitivity factor (ASF) of 1.7 is used for a residential scenario.

⁵BAAQMD. Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines. January 2010.

⁶Cal/EPA. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Office of Environmental Health Hazard Assessment. August 2003.

⁸ BAAQMD. Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines. January 2010.

⁹ California Environmental Protection Agency (Cal EPA). Toxicity Criteria Database. July 21, 2009.



Carcinogenic risks are estimated as the incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens¹¹. The estimated risk is expressed as a unitless probability. The excess lifetime cancer risk estimates for truck and train emissions are presented in **Table 6** and **Table 7** (above), respectively.

The potential for exposure to result in chronic noncancer effects is evaluated by comparing the estimated annual average air concentration (which is equivalent to the average daily air concentration) to the noncancer chronic REL for DPM. When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient (HQ). To evaluate the potential for adverse chronic noncancer health effects from simultaneous exposure to multiple chemicals, the HQs for all chemicals are summed, yielding an HI. The chronic noncancer HQ estimates for truck and train emissions are presented in **Table 6** and **Table 7** (above), respectively.

The equation used to calculate the HQs is:

$$HQ_i = C_i / cREL_i$$

Where:

HQ_i = Hazard Quotient for Chemical_i

C_i = Average Daily Air Concentration for Chemical_i (µg/m³)

cREL_i = Chronic Noncancer Reference Exposure Level for Chemical_i (µg/m³)

As summarized in **Table 3**, above, for the maximum residential location, the estimated excess lifetime cancer risk due to the project is less than 10 in a million (1×10⁻⁵); the estimated chronic noncancer HI would be less than 1.0; and the maximum estimated PM_{2.5} concentration in air would be less than 0.3 µg/m.³

As discussed earlier, ConAgra currently contracts with a trucking operator for delivery of bulk flour shipments to customers in the Bay Area, which account for at least 75 percent of the total flour shipments. As part of ConAgra's Plant Modernization and Expansion project, ConAgra has implemented a requirement that the current trucking company use a dedicated fleet for these shipments consisting of 2011 model-year trucks.

The use of 2011 model-year or newer trucks for bulk deliveries for the proposed project would ensure that the incremental construction and operational-related GHG and CAP emissions and related parameters and local community risk and hazard impacts would be reduced compared with a 'business as usual' scenario and, therefore, there would be no impact in this regard.

¹⁰ BAAQMD. Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines. January 2010.

¹¹ Cal/EPA. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Office of Environmental Health Hazard Assessment. August 2003.



A cumulative risk assessment was not conducted as all estimated risks, hazards and PM_{2.5} concentrations associated with facility would be reduced by the project and would be lower than current conditions.

As confirmed by the BAAQMD Compliance & Enforcement Division, the BAAQMD has no recorded odor complaints associated with operation of the flour mill. Therefore, the BAAQMD anticipates that the proposed A-Mill equipment modifications would not result in any objectionable odors to the surrounding community.

4. BIOLOGICAL RESOURCES

As there would be no physical changes beyond the walls of existing structures at the site as a result of the proposed A-Mill equipment modifications, this project would not have any impact on biological resources. There are no endangered plants or animal species within the project site which could be impacted. There would be no changes in the diversity of species, the number of plants or changes in animal life on or near the project site.

5. CULTURAL RESOURCES

As there would be no physical changes beyond the walls of existing structures at the site as a result of the proposed A-Mill equipment modifications, this project would not have any impact on cultural resources, and would not result in the alteration or destruction of a prehistoric or historic archaeological site. The proposed modifications would be made within an existing facility, which is not located within a historic conservation area. There is no potential for impact on any cultural resources. No physical changes will be made that could affect unique ethnic cultural values.

6. ENERGY

The proposed project would result in a net increase of energy consumption. In 2009, the facility used 12,731,184 Kilowatt hours ((kWh) of electricity, and for 2010, electricity use was estimated at 14,354,244 kWh. With the proposed A-Mill equipment modifications, electricity use at the site is anticipated to rise to 14,331,924 kWh in 2011, to 14,685,742 kWh in 2012 and 15,463,867 kWh in 2013. This would represent an on-site increase in electricity use of approximately 7.7 percent between 2010 and 2013, an increase that would be regarded as less than significant, and within the current capability of the electrical utility (Pacific Gas and Electric Company) to provide without the need to develop new sources of electrical energy. It should be noted that the demand for electricity at the site is a function of the level of milling activity, and if future demand for flour produced at the facility were to be less than currently anticipated, demand for electricity would also be reduced below current estimates.

7. GEOLOGY/SOILS

The proposed A-Mill equipment modifications would not result in any construction outside existing structures. The project site as it currently exists would not be altered upon completion of the proposed equipment modifications, and these modifications would not result in any change to geologic substructures, disruptions, displacement and compaction or over-covering of soil, or changes in topography or surface relief features. No soil would be disturbed in making the proposed equipment



modifications, and these modifications would not involve any structures that would be considered seismically unstable. Approval of the proposed A-Mill equipment modifications would not have any anticipated geologic impacts.

8. GREENHOUSE GASES

As indicated above, ENVIRON conducted an analysis of GHGs impacts related to the proposed Mill A modernization project. ENVIRON followed CEQA Guidelines¹² issued by the BAAQMD in June 2010 to determine whether the emissions associated with the proposed project would be below the thresholds of significance listed in the Guidelines under a screening analysis. A project's impact on air quality is considered significant if it exceeds the significance thresholds.

The project would result in slight increases in annual (operational-related) emissions from mobile sources (e.g., trucks and trains for material transport) and some indirect GHG emissions associated with electricity used for operation of equipment.

Truck traffic to and from the facility for both delivery of raw materials and delivery of finished product were calculated by ConAgra and supplied to ENVIRON (see **Table 4**, above). project operational-related traffic GHG emission factors were taken from the California Air Resources Board EMFAC¹³ using default assumptions for heavy heavy-duty trucks (HHDT) in Alameda County. The emission factors from EMFAC for HHDT in Alameda County were combined with the information on truck traffic to calculate the estimated carbon dioxide (CO₂) emissions in 2010 and 2013. See **Table 9** for these calculations.

Table 9. Mobile Source Greenhouse Gas (GHG) Emissions

Year ^(a)	VMT	CO ₂ Emission Factor (MT/VMT)	CO ₂ MT
2010	395,581	1.87 x 10 ⁻³	74
2013	447,541	1.87 x 10 ⁻³	83
	Increment		97

Notes:

^(a) Year 2010 operations are representative of emissions associated with the baseline year. Year 2013 operations are representative of emissions associated with the completion of the project.

Abbreviations:

CO₂ = carbon dioxide

MT = metric tonnes (1 MT = 1 tonne = 2205 pounds)

VMT = vehicle miles traveled

¹² BAAQMD, California Environmental Quality Act Air Quality Guidelines, June 2010. Available online at: http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_June%202010.ashx, accessed August 2010.

¹³ www.arb.ca.gov/msei/onroad/latest_version.htm, accessed July 2010.



The facility also receives shipments of raw material by rail. GHG emissions were calculated based on locomotive idling time while the material is transferred to the facility. Rail activity data was provided by ConAgra and supplied to ENVIRON. An emission factor for locomotives from the USEPA¹⁴ was combined with the rail activity data to calculate carbon dioxide equivalents (CO₂e) emissions in 2010 and 2013. These calculations are shown in **Table 10**.

Table 10. Greenhouse Gas (GHG) Emissions Due to Locomotives

Year ^(a)	Cars	Switches ^(b)	Hours/Year Switching ^(c)	CO ₂ e Emission Factor (g/hr) ^(d)	CO ₂ MT
2010		77.8	38.9	46,794	1.8
2013		96.8	48.4	46,794	2.3
				Increment	0.4

Notes:

- (a) Year 2010 operations are representative of emissions associated with the baseline year. Year 2013 operations are representative of emissions associated with the completion of the project.
- (b) Assumed 15 cars per switch based on communication from ConAgra.
- (c) Time per switch = 0.5 hours, based on information provided by ConAgra.
- (d) Derived from an emission factor of 10,173 g CO₂/gallon of diesel from the USEPA (2007). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005. United States Environmental Protection Agency. EPA 430-R-07-002. April 15, 2007. Washington DC. and a fuel usage estimate of 4.6 gal/hour for a GP-3X locomotive at idle.

Abbreviations:

CO₂ = carbon dioxide

MT = metric tonnes (1 MT = 1 tonne = 2205 pounds)

VMT = vehicle miles traveled

ENVIRON also calculated direct and indirect GHG emissions due to the incremental increase in electricity use at the facility due to the increase in milling capacity. The project is supplied power by Pacific Gas and Electric (PG&E). The average PG&E carbon-intensity factor during 2008¹⁵ was used in calculations of GHG emission due to energy use. The carbon-intensity factor for electricity is 641 pounds (lbs) of carbon dioxide equivalent (CO₂e) emissions per megawatt hour (MWh); this takes into account California's promulgated Renewable Portfolio Standard (RPS) requirements. This emission factor was combined with electricity demand estimates developed by ConAgra and provided to ENVIRON. The project would also include an increased demand for electricity of 1,110 MWh. The increase in electricity demand leads to an increase in GHG emissions due to electricity generation of 323 MT CO₂e per year. The calculations are shown in **Table 11**.

¹⁴ USEPA (2007). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005. United States Environmental Protection Agency. EPA 430-R-07-002. April 15, 2007. Washington DC. http://www.epa.gov/climatechange/emissions/usgginv_archive.html

¹⁵ California Climate Action Registry (CCAR) Database. PG&E PUP Report. 2006, 2007, and 2008.



The project's total leads to an incremental increase in GHG emissions of 420 metric tons (MT)¹⁶ CO₂e¹⁷. This value is well below BAAQMD's GHG thresholds (see **Table 5** above).

Table 11. Greenhouse Gas (GHG) Emissions from Electricity Generation

Year ^(a)	Electricity Demand (kWh)	CO ₂ Emission Factor (MT/kWh)	CO ₂ MT
2010	14,354,244	2.91 x 10 ⁻⁴	4,176
2013	15,463,867	2.91 x 10 ⁻⁴	4,499
		Increment	323

Notes:

(a) Year 2010 operations are representative of emissions associated with the baseline year. Year 2013 operations are representative of emissions associated with the completion of the project.

Abbreviations:

CO₂ = carbon dioxide

kWh = kilowatt hour

MT = metric tons (1 MT = 1 tonne = 2,205 pounds)

9. HAZARDS & HAZARDOUS MATERIALS

This project would not result in the use of or disposal of potentially hazardous materials, such as toxic substances, flammables or explosives. The proposed A-Mill equipment modifications would not result in any increase in hazardous material use, storage and transport activity beyond current facility baseline operating conditions.

10. HYDROLOGY/WATER QUALITY

This project would not result in change of ocean, bay, lake, stream or groundwater quality or quantity, or result in any alteration of existing drainage patterns, or change any existing features of any bays, tidelands, beaches, or alteration of ground contours. Operation of the existing milling equipment at the site is not associated with water discharges, and does not impact the hydrology or water quality of the area. Approval of the proposed A-Mill equipment modifications would not substantively change the character of the facility's current operations, and there is no anticipated impact to hydrology and water quality.

¹⁶ GHG emissions are generally reported in metric tons; 1 metric ton (also known as tonne) is equal to 1,000 kilograms or approximately 1.102 short tons or 2,205 pounds (lbs).

¹⁷ CO₂e, or carbon dioxide equivalent, is a measure used to compare or summarize the emissions from various greenhouse gases based upon their global warming potential (GWP). Carbon dioxide equivalents are commonly expressed as "metric tons of carbon dioxide equivalents (metric tons of CO₂e)." The carbon dioxide equivalent for a gas is derived by multiplying the metric tons of the gas by the associated GWP.



11. LAND USE AND PLANNING

The proposed A-Mill equipment modifications would not change the pattern, scale or character of the general area of the project site. The site is currently used for milling flour, and no change of use is proposed. Installation and operation of the replacement equipment in A-Mill would not change any land use designation of the facility or its immediate surroundings, which is compatible with the site's existing zoning as "Heavy Industrial". Approval of the proposed modifications would not change operations at the facility from its baseline use, and no impacts on land use and planning are anticipated. With respect to the ConAgra site and adjacent industrial parcels, the City of Oakland's "Oakland Estuary Policy Plan", Policy SAF-3 states: "Encourage heavy industry in the vicinity of the Con-Agra plant to continue, while providing for the transition to a mix of uses." This policy recognizes that if market forces shift, making the existing ConAgra facility and other industrial operations in the vicinity functionally obsolete and difficult to maintain, the City should be prepared to promote new uses for these valuable waterfront sites. The proposed A-Mill equipment modifications would enhance the ability of the ConAgra facility to resist becoming functionally obsolete.

12. MINERAL RESOURCES

The placement and operation of the existing milling facility did not involve significant impacts on any existing mineral resources. The proposed A-Mill equipment modifications do not involve any soil disturbance or construction and, thus, would not have any impact on any existing mineral resources.

13. NOISE

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. Decibels and other technical terms are defined in **Table 12**. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound in accordance with a weighting that reflects the facts that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency mid-range. This is called "A" weighting, and the decibel level so measured is called the A-weighted sound level (dBA). In practice, the level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve. Typical A-weighted levels measured in the environment and in industry are shown in **Table 13** for different types of noise.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources, which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_{01} , L_{10} , L_{50} , and L_{90} , are commonly used. They are the A-weighted noise levels equaled or exceeded during 1percent, 10 percent, 50 percent, and 90 percent of a stated time



period. A single number descriptor called the L_{eq} is also widely used. The L_{eq} is the average A-weighted noise level during a stated period of time.

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, a descriptor, L_{dn} (day/night average sound level), was developed. The L_{dn} divides the 24-hour day into the daytime of 7:00 AM to 10:00 PM and the nighttime of 10:00 PM to 7:00 AM. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The Community Noise Equivalent Level (CNEL) is another 24-hour average, which includes both an evening and nighttime weighting.



Table 12: Definitions of Acoustical Terms Used in this Report

Term	Definitions
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, Leq	The average A-weighted noise level during the measurement period.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L₀₁, L₁₀, L₅₀, L₉₀	The A-weighted noise levels that are exceeded 1percent, 10 percent, 50 percent, and 90 percent of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.



Table 13: Typical Noise Levels in the Environment

Common Outdoor Noise Source	Noise Level	Common Indoor Noise Source
	120 dBA	
Jet fly-over at 300 meters		Rock concert
	110 dBA	
Pile driver at 20 meters		
	100 dBA	
		Night club with live music
	90 dBA	
Large truck pass by at 15 meters		
	80 dBA	Noisy restaurant
		Garbage disposal at 1 meter
Gas lawn mower at 30 meters		Vacuum cleaner at 3 meters
Commercial/Urban area daytime	70 dBA	Normal speech at 1 meter
Suburban expressway at 90 meters	60 dBA	
Suburban daytime		Active office environment
	50 dBA	
Urban area nighttime		Quiet office environment
	40 dBA	
Suburban nighttime		
Quiet rural areas	30 dBA	Library
		Quiet bedroom at night
Wilderness area	20 dBA	
Most quiet remote areas	10 dBA	Quiet recording studio
Threshold of human hearing	0 dBA	Threshold of human hearing



REGULATORY BACKGROUND

The State of California and the City of Oakland establish regulatory criteria designed to guide compatible development in varying noise environments and protect existing uses from excessive noise increases.

California Environmental Quality Act

The State CEQA guidelines address how to evaluate the significance of effects of environmental noise attributable to a proposed project. The CEQA guidelines ask the following questions relevant to the proposed Mill Modernization project.

- Would the project result in the exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels.
- Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

CEQA does not define what noise level increase would be considered substantial. Typically in high noise environmental (i.e., greater than 60 dBA, L_{dn}), an increase by more than 3 dB L_{dn} due to the project would be considered a significant impact. Where the existing noise levels are lower (i.e. less than 60 dBA, L_{dn}), a greater than 5 dB, L_{dn} increase would be considered a significant impact.

City of Oakland General Plan Noise Element

The of City of Oakland's General Plan Noise Element sets forth implementing policies to guide the development of proposed land uses. The following policy and action items are be applicable to this noise assessment:

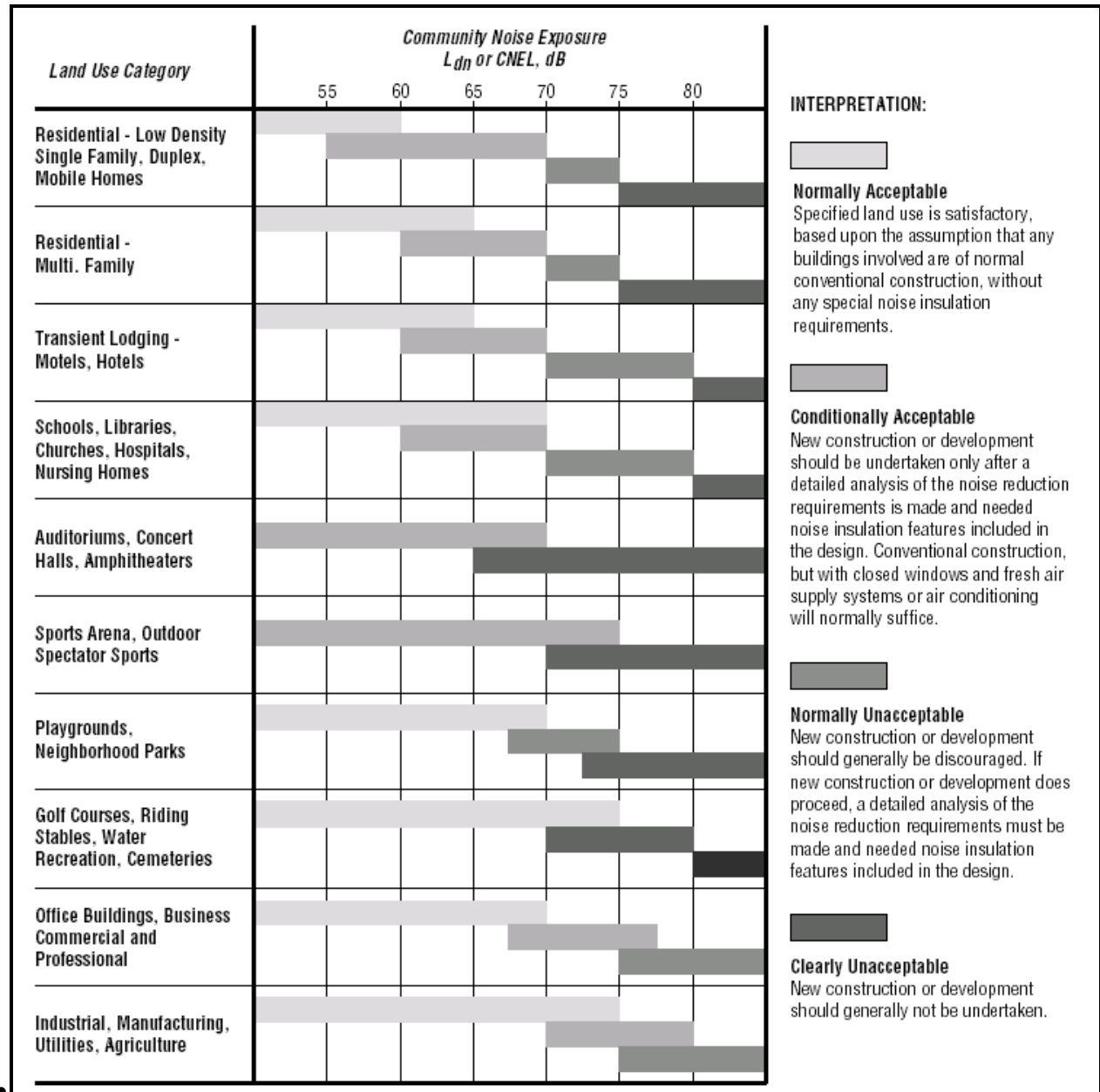
Policy 1: Ensure the compatibility of existing and, especially, of proposed development projects not only with neighboring land uses but also with their surrounding noise environment.

ACTION 1.1: Use the noise-land use compatibility matrix (see **Figure 4**, below) in conjunction with the noise contour maps to evaluate the acceptability of residential and other proposed land uses and also the need for any mitigation or abatement measures to achieve the desired degree of acceptability.

ACTION 1.2: Continue using the City's zoning regulations and permit processes to limit the hours of operation of noise-producing activities, which create conflicts with residential uses, and to attach noise-abatement requirements to such activities.



Figure 4: Noise and Land Use Compatibility Matrix



City of Oakland Noise Performance Standards

Section 17.120.050 the City of Oakland Municipal Code establishes Noise Performance Standards, with respect to proposed machinery, processes, products, or environmental effects. These standards limit the maximum allowable noise levels that may be experienced at residential, school, child care, health care or nursing home, public open space, and similarly sensitive land uses daytime and the nighttime hours based on the duration of the noise event in any one-hour. The standards are shown in **Table 14**, below.



Table 14: City of Oakland Maximum Allowable Residential Noise Level Standards

Cumulative Duration of Event in any one-hour period (related metric) ¹	Maximum Exterior Noise Level Standard, dBA	
	Daytime (7 am to 10 pm)	Nighttime (10 pm to 7 am)
20 minutes (L ₃₃)	60	45
10 minutes (L ₁₇)	65	50
5 minutes (L ₈)	70	55
1 minute (L ₀₂)	75	60
0 minutes (L _{max})	80	65

Notes

- 1: L₃₃ = the sound level exceeded 33 percent of the time, equivalent to 20 minutes out of an hour
- L₁₇ = the sound level exceeded 17 percent of the time, equivalent to 10 minutes out of an hour
- L₀₈ = the sound level exceeded 8 percent of the time, equivalent to 5 minutes out an the hour
- L₀₂ = the noise level exceeded 2 percent of the time, equivalent to 1 minute out an the hour
- L_{max} = the maximum noise level measured during an hour

These standards are typically applied to non-transportation, fixed-type, noise sources, but are presented and used in this analysis for rail events, to determine compliance with these standards, but for the purposes of evaluating increases in noise levels relative to the standards.

EXISTING NOISE ENVIRONMENT

ConAgra Mills is located at 2201 E. 7th Street in the City of Oakland. The facility is located within a commercial/industrial area, with residential uses east of 23rd and 29th Avenues, and a park to the northwest. The background ambient noise environment in these area results primarily from local and distant traffic on both 23rd and 29th Avenues, and Interstate 880. Based on a review of Tables B-4 and B-5 of Noise Element, and considering shielding from intervening structures, residential uses east of 23rd Avenue and south of I-880 are currently exposed to noise levels in excess of 65 dBA L_{dn}¹⁸. Given the relatively large distances between the mill facility and the closest of residential areas (over 900 feet), combined with relatively high background noise levels in these areas, noise produced by the operation of new equipment at the mill is not judged to result in any significant increase in noise in these sensitive areas.

However, raw material is shipped into the mill via train cars on a rail line that runs down the center of Glascock Street southeast of 29th Avenue. These rail shipments typically come in the early morning hours, three days per week¹⁹ to avoid car traffic heading over to or from the Park Street Bridge to Alameda. The residential uses fronting Glascock Street may thus be adversely affected by noise from

¹⁸ Ambient traffic noise levels at 65 dBA L_{dn} at 120 feet from the centerline of 23rd Avenue and at 2400 feet from the centerline of I-880 per General Plan Tables B-4 and B-5.

¹⁹ Tuesday, Thursday and Saturday mornings per Bart Hahlweg email 8/08/10



continuing and increased rail traffic to the Mill. Therefore, a long-term noise monitoring survey was conducted to establish local existing noise conditions at the residential uses along Glascock Street facing the rail line serving the mill. The measurement was made with a Larson Davis Laboratories (LDL) model 820 sound level meter located in a tree at about 50 feet from the centerline of the railroad track in a tree at the southwest corner of the intersection of Glascock Street and Peterson Street. The approximate location of the measurement is shown in **Figure 5**.

The noise monitoring survey consisted of one long-term 96-hour (4 day) noise measurement between 1 PM on Friday September 10th and 1 PM on Tuesday September 14th, 2010. The hourly trend in noise levels at measurement location, including the energy equivalent noise level (L_{eq}), and the statistical noise levels representing the limits set forth in **Table 14** (noise levels exceeded 2, 8, 17 and 33 percent of the time) are shown on **Chart 1**, following. A review of this chart shows that the 4-day average day-night noise level (L_{dn}) at the measurement site was 62 dBA. In terms of daily levels the L_{dn} for those 24 hour periods without rail passbys was 59 dBA (9/11 to 9/12) and 58 dBA (9/12 to 9/13), while the L_{dn} for those 24 hour periods with rail passbys was 66 dBA (9/10 to 9/11) and 63 dBA (9/13 to 9/14). Hourly daytime average (L_{eq}) noise levels during the 4-day measurement period ranged from 53 dBA to 61 dBA. Nighttime hourly average (L_{eq}) noise levels for the 24 hour periods without trains ranged from 46 dBA to 56 dBA and nighttime hourly average (L_{eq}) noise levels for the 24 hour periods with train passbys ranged from 48 dBA to 68 dBA.

Figure 5: project Vicinity and Noise Monitoring Position



During the measurement period, the environmental noise was also recorded on an Edrol model R-09HR digital solid state recorder to allow for the correlation of elevated noise levels to train passbys and other loud nighttime events. Based on this analysis, two trains traveled on the Glascock Street rail line on both Saturday (9/11/10) and Tuesday (9/13/10) mornings between midnight and 2 AM. This frequency of use concurs with the pattern reported by mill personnel. The duration in which noise levels from all four passbys exceeded ambient noise levels was about one (1) minute. Three of the four monitored trains are characterized as slow moving and/or stopping with significant noise due to clanging metal, rail squeals and/or screeching brakes, and bells during the passby, and one of the four monitored trains did not emit this type of noise, indicating a non-stopping/or slowing train. Maximum noise levels for the slow moving and/or stopping trains ranged from 90 to 94 dBA at 50 feet, while the non-stopping/or slowing train produced a maximum noise level of 79 dBA at 50 feet. Other loud nighttime noise levels in the area included loud vehicle passbys, car horns, and alarms/beepers at between 78 to 86 dBA.

A summary of the measurement results with respect to the noise descriptors used to interpret the City's Noise Performance Standards is given in **Table 15**. **Table 15** includes separate entries for the nighttime noise descriptors measured on nights with and without train passbys.

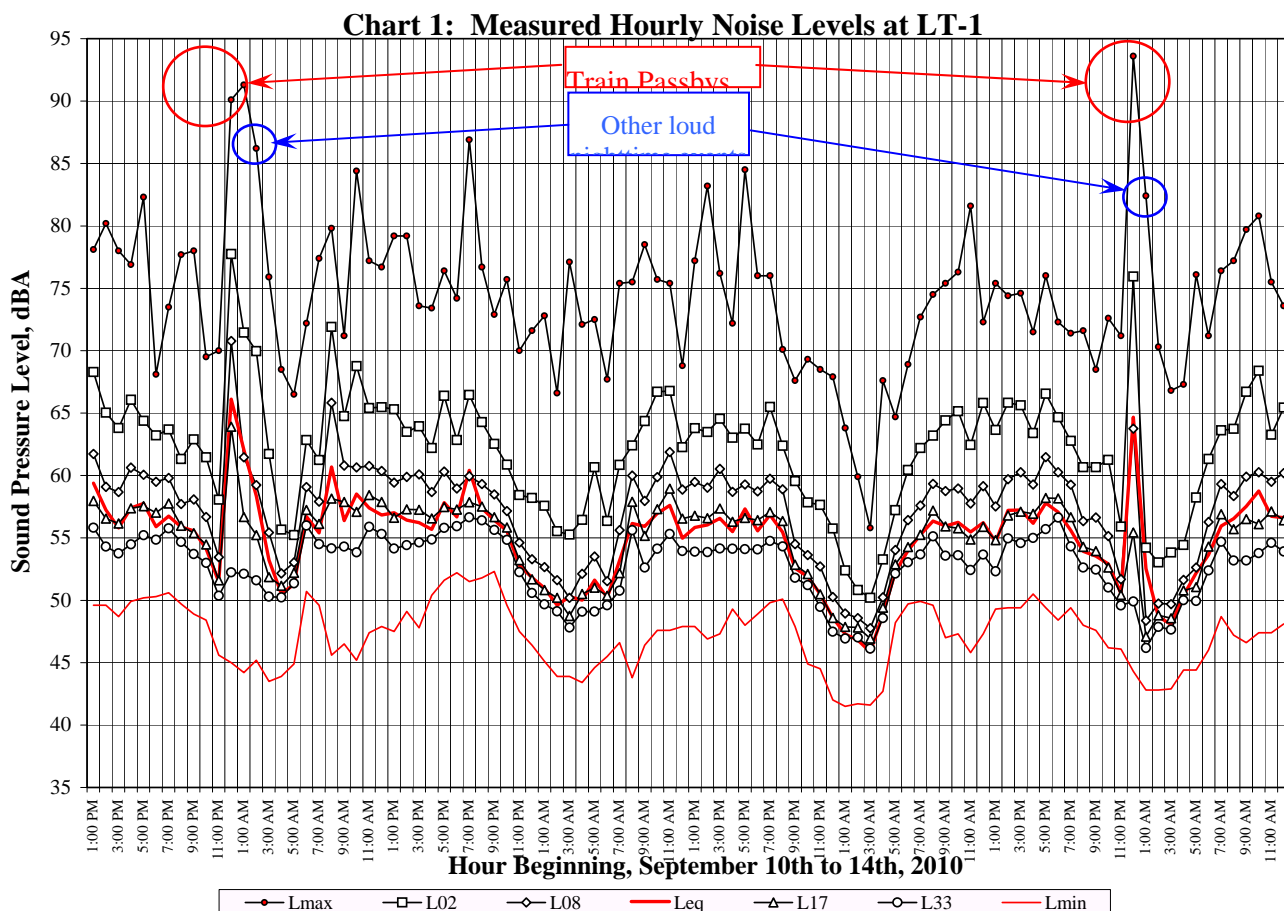


Table 15: Noise Measurements vs. City Noise Performance Standards

Hourly Noise Metric	Measured Exterior Noise Levels, dBA		
	Daytime Level	Nighttime Level <i>without</i> trains	Nighttime Level <i>with</i> trains
L ₃₃ (20 Min.)	54	51	52
L ₁₇ (10 Min.)	57	52	60
L ₀₈ (5 Min.)	60	54	67
L ₀₂ (1 Min.)	65	61	76
L _{max} (0 min)	78	86	94

Based on calculations using the hourly noise metric used for the City’ noise performance standards for the average nighttime hourly levels with and without train passbys, the current level of rail activities produce respective average L_{max}, L₀₂, L₀₈, L₁₇, and L₃₃ levels of 92, 76, 67, 60, and 44 dBA, and with the exception of L₃₃ (20 minutes per hour) levels, current train operations exceed the hourly Noise Performance standards without trains by 6 to 15 dBA.

FUTURE NOISE ENVIRONMENT

Because of the relatively large distances from the flour mill itself to the surrounding noise sensitive uses, and the anticipated little or no increase in mill noise emissions from the new equipment proposed by the modernization project, the only potentially significant changes to the noise environment at the surrounding noise sensitive uses is expected to result from increased truck and rail trips to and from the facility. Based on a review of increased truck traffic resulting from the modernization project, noise levels due to increased truck traffic on the nearby roadways have been calculated to increase by less than 1 dBA. The number or frequency of trains moving to and from the project site is not expected to increase due to the project. However, the number of rail cars per train is projected to increase from a current average train length of 4 cars to an average train length of 7 to 8 rail cars at full project operations.

Though maximum noise levels from rail passbys would remain the same, based on an increased duration of noise due to the increased train length, the L₀₂, L₀₈, L₁₇ and L₃₃ levels at the Glascock Street residential uses would respectively increase by 3, 3, 2 and 2 dBA during hours with train passbys, resulting in future train operations exceeding the hourly City Noise Performance standards without trains, with the exception of L₃₃ (20 minutes per hour) levels, by 6 to 17 dBA. With the increased train lengths, the L_{dn} at the Glascock Street residential uses on nights with train passbys would increase by 1 dBA to between 64 and 67 dBA.

The project would not result in exposure of persons to or generation of excessive ground-borne vibration or excessive ground-borne noise levels, and impacts associated with ground-borne vibration and noise would be considered less than significant. The project site is significantly distant from off-site sensitive uses, such that any vibration generation operations or project-related construction activity on-



site would result in less than perceptible increases at off-site sensitive receptor locations. Additionally, increased rail operations are not expected to produce any perceptible increase in ground-borne vibration levels at off-site sensitive receptor locations.

The project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, and impacts associated with project-related noise would be considered less than significant. Sensitive uses in the vicinity of the site are exposed to ambient noise levels ranging from 58 dBA to in excess of 65 dBA L_{dn} . The project site is significantly distant from noise sensitive uses, such that any increases in on-site noise generating operations or project-related construction would result in less than perceptible increases at off-site sensitive receptor locations. Though current train operations exceed City Noise Performance standards by 6 to 15 dBA at residences adjacent to the railroad tracks which serve the project site, increased rail operations allowed for the A-Mill modernization project would increase these levels by 3 dBA or less, and the L_{dn} at noise sensitive uses by only 1 dBA. Additionally, increased truck traffic on area roadways is expected to result in increased noise level of 1 dBA or less. An increase of less than 3 dBA would be considered *less than significant* under CEQA.

14. POPULATION AND HOUSING

Facility operations with the proposed A-Mill equipment modifications would not require any additional employees. Therefore, the proposed project would have no anticipated impact on local population and housing.

15. PUBLIC SERVICES

Current fire protection and police protection for the milling facility is considered to be adequate. The A-Mill equipment modifications would not substantially increase the demand for municipal services (e.g., police, fire, schools, etc.), and would not be anticipated to have any significant impact on the provision of public services.

16. RECREATION

The proposed A-Mill equipment modifications would have no impact on the quality or quantity of local recreational resources, and would not result in any future demand for recreational resources.

17. TRANSPORTATION/TRAFFIC

Trucks and railcars would be utilized to bring the additional wheat to the site and to move flour and feed shipments once the proposed A-Mill equipment modifications have been implemented, although current intermill shipments of flour would be eliminated (**Table 4**). **Table 4** indicates that there were 11,870 truck trips in 2010 (approximately 33 per day) and the number is expected to increase to 13,356 (37 per day) in 2013. The increase in this traffic is estimated to be approximately four truck trips/day and approximately 1-2 railcars/week (**Table 16**).



Table 16: Change in Truck and Train Trips

Trip Type	2010	2013
Truck Trips per year, all types 1/	11,870	13,356
Average number of trucks per day 2/	32.5	36.6
Train cars per year 3/	1,167	1,452
Train cars per week 4/	22.4	27.9
Average number of train switches per week 5/	3	3
Average train cars per switch 6/	7.5	9.3

Notes:

1/ From Table 2, above

2/ 365 days per year

3/ 2010 data is from ConAgra records; 2013 is ConAgra estimate; see also Table 7, above.

4/ 52 weeks per year

5/ Information provided by ConAgra

6/ Cars per week / switches per week

The addition of four truck trips per day would not be considered to have a significant effect on existing local traffic patterns. In most weeks at full operational capacity, there would be three to four trains serving the site, either with or without the proposed A-Mill equipment modifications. Following implementation of the project, 1 – 2 additional railcars would simply be added to the trains currently serving the site each week.

18. UTILITIES/SERVICE SYSTEMS

The proposed A-Mill equipment modifications would not substantially increase the demand for utility services (e.g., water, sewer, solid waste disposal, etc.) and would not create significant incremental amounts of solid waste or litter. Therefore, the proposed A-Mill equipment modifications would have no impact on utilities and service systems.

19. MANDATORY FINDINGS OF SIGNIFICANCE

For the findings required by the California Environmental Quality Act, all of the impacts cited would be less than significant and no mitigation measures would be required.

A) Quality of the Environment

The proposed A-Mill equipment modifications would not result in significant adverse effects on the environment in terms of impacts associated with various CEQA issue topics, as discussed in this Initial Study. Implementation of the project would not degrade the quality of the environment provided all policies, rules, and regulations of all relevant governing bodies are adhered to.



B) Cumulative Impacts

Cumulative impacts associated with the proposed A-Mill equipment modifications are considered to be ***less than significant***. As discussed in the preceding sections of this checklist, implementation of the project would not cumulatively impact the environment provided all policies, rules and regulations of all relevant governing bodies are adhered to.

C) Adverse Effects on Human Beings

While human beings could be affected by a variety of impacts described above, the proposed A-Mill equipment modifications would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. The project would not expose people to new hazards.



SOURCES

1. ConAgra Mills, Oakland Mill Modernization Summary, CEQA Environmental Review, July, 2010.
2. City of Oakland, Oakland Estuary Policy Plan, June 1999, pages 107–109.
3. Illingworth & Rodkin, Inc. “ConAgra Mills Modernization project Environmental Noise Study, Oakland, California”, September 20, 2010.



APPENDIX A

2011 PM2.5

This : 2013
Version : Emissions2002 V2.3 Nov 4, 2006
Run Date : 2010/10/22 13:08:37
Season : Annual
Area : Alameda County
I/M Stat : Enhanced Interim (2005)

Table with multiple columns representing various pollutant categories such as CO, HC, NOx, PM10, PM2.5, SOx, and others, with sub-columns for different vehicle categories (e.g., HDV, LDV, Offroad) and activity types (e.g., Run, Idle, Start, Exh). It includes summary rows for total emissions and fuel consumption.

APPENDIX B

Appendix B-1 Trucks at Facility

09/14/10 14:43:37

*** SCREEN3 MODEL RUN ***
 *** VERSION DATED 96043 ***

ConAgra Facility

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA
 EMISSION RATE (G/(S-M**2)) = 1.00000
 SOURCE HEIGHT (M) = 4.7500
 LENGTH OF LARGER SIDE (M) = 150.0000
 LENGTH OF SMALLER SIDE (M) = 75.0000
 RECEPTOR HEIGHT (M) = 1.0000
 URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
 THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

 *** SCREEN DISCRETE DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
90.	.1144E+08	5	1.0	1.0	10000.0	4.75	20.
100.	.1198E+08	5	1.0	1.0	10000.0	4.75	18.
110.	.1212E+08	5	1.0	1.0	10000.0	4.75	21.
120.	.1190E+08	5	1.0	1.0	10000.0	4.75	21.
130.	.1141E+08	5	1.0	1.0	10000.0	4.75	20.
140.	.1082E+08	5	1.0	1.0	10000.0	4.75	19.
150.	.1021E+08	5	1.0	1.0	10000.0	4.75	17.
160.	.9626E+07	5	1.0	1.0	10000.0	4.75	15.
170.	.9076E+07	5	1.0	1.0	10000.0	4.75	12.

 *** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.1212E+08	110.	0.

 ** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

Appendix B-2 Trucks on Street

09/14/10

14:53:03

*** SCREEN3 MODEL RUN ***
 *** VERSION DATED 96043 ***

ConAgra Street

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA
 EMISSION RATE (G/(S-M**2)) = 1.00000
 SOURCE HEIGHT (M) = 4.7500
 LENGTH OF LARGER SIDE (M) = 100.0000
 LENGTH OF SMALLER SIDE (M) = 10.0000
 RECEPTOR HEIGHT (M) = 1.0000
 URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
 THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

 *** SCREEN DISCRETE DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
20.	.2921E+07	4	1.0	1.0	320.0	4.75	0.
30.	.3176E+07	5	1.0	1.0	10000.0	4.75	0.
40.	.3547E+07	5	1.0	1.0	10000.0	4.75	2.
50.	.3897E+07	5	1.0	1.0	10000.0	4.75	0.
60.	.4184E+07	5	1.0	1.0	10000.0	4.75	0.
70.	.4398E+07	5	1.0	1.0	10000.0	4.75	0.
80.	.4293E+07	5	1.0	1.0	10000.0	4.75	0.
90.	.3905E+07	5	1.0	1.0	10000.0	4.75	0.
100.	.3435E+07	5	1.0	1.0	10000.0	4.75	0.

 *** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.4398E+07	70.	0.

 ** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

NO	60.	707.5	4	2.5	2.5	800.0	10.69	9.65	8.51
NO	70.	668.8	4	2.0	2.0	640.0	12.23	11.26	9.95
NO	80.	623.0	4	1.5	1.5	480.0	14.80	12.94	11.45
NO	90.	588.3	4	1.5	1.5	480.0	14.80	14.45	12.78
NO	100.	543.7	4	1.5	1.5	480.0	14.80	15.96	14.10

DWASH= MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
 DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
 DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

 *** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
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SIMPLE TERRAIN	780.0	30.	0.

 ** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
