EMP Coordinator(s) and Organization(s):	**Revision Date:**	**EMP No.:**
Patrick Thorson (EH&S); Facilities	1/13/2010	05-01D

Aspect:	**Objective:**	**Target:**
Diesel Particulate Matter Air Emissions	Track implementation alternatives for reducing diesel particulate matter (DPM) emissions from: (1) mobile, and (2) stationary sources.	Reduce DPM emissions by 5% per year relative to a Calendar Year (CY) 2005 baseline year.

Category:

X Improve ☐ Control ☐ Study (short term)

Strategy:

California identified diesel particulate matter as a toxic air contaminant based on its potential to cause cancer and other adverse health effects. Subsequently, the California Air Resources Board established a *Diesel Risk Reduction Program* (www.arb.ca.gov/diesel/dieselrrp.htm). Emissions from diesel engines are the greatest of potential airborne cancer risk in California. Diesel emissions from LBNL activities have also been showed to generate the majority of airborne cancer risk.

In response to DPM rulemaking in California, and to lower potential cancer risks, DPM reduction alternatives will be implemented for:

1. LBNL mobile sources (i.e., buses and trucks) – does not include contractor vehicles
2. stationary sources (i.e., emergency generators)

Reductions will be reviewed semi-annually and tracked annually.

Actions to Achieve Objective:

Upcoming Actions	***Lead***	***Due Date***	***Completion***
1. Calculate CY09 DPM emissions and prepare graphic.	P. Thorson	1/31/10	2/8/10
2. Switch to contracted shuttle bus service provider using cleaner fleet of vehicles.	P. Thorson	2/1/10	
3. Perform semi-annual review of DPM emissions.	P. Thorson	8/1/10	
4. Install new generator at User Support Building.	P. Thorson	9/30/10	
5. Install replacement generator to serve Building 74.	P. Thorson	9/30/10	
Completed Actions	***Lead***	***Due Date***	***Completion***
1. Using CY05 as a baseline year, calculate DPM emissions.	P. Thorson	1/15/06	1/10/06
2. Prepare graphic to track annual DPM emissions.	P. Thorson	2/1/06	1/6/06
3. Perform semi-annual review of DPM emissions.	P. Thorson	7/15/06	7/31/06
4. Provide facilities source-specific information for prioritizing FY07 funding request.	P. Thorson	8/15/06	8/15/06
5. Calculate CY06 DPM emissions and prepare graphic.	P. Thorson	1/15/07	1/12/07
6. Perform semi-annual review of DPM emissions.	P. Thorson	7/15/07	7/13/07
7. Provide facilities source-specific information for prioritizing FY08 funding request.	P. Thorson	8/17/07	8/17/07
8. Calculate CY07 DPM emissions and prepare graphic.	P. Thorson	1/15/08	1/15/08
9. Request FY08 supplemental funding for emergency generator diesel abatement.	R. Pauer	6/1/08	5/7/08

10. Submit BAAQMD operating permit for diesel abatement device installation.	P. Thorson	7/1/08	6/25/08
11. Perform semi-annual review of DPM emissions.	P. Thorson	7/15/08	7/18/08
12. Complete installation of diesel abatement devices. (*see comment a*)	Facilities	9/30/08	—
13. Calculate CY08 DPM emissions and prepare graphic.	P. Thorson	1/15/09	1/14/09
14. Perform semi-annual review of DPM emissions.	P. Thorson	7/15/09	9/22/09
15. Complete installation of approved diesel abatement device(s).	Facilities	9/30/09	9/24/09

Metrics (Environmental Performance Indicators):

1. DPM emission rate (grams/brake horsepower-hour or equivalent)

Comments:

a) The Bay Area Air Quality Management District's review of a permit application to install diesel particulate filters on three generators caused an unanticipated delay in approval of the installation, leading to the forfeiture of FY08 funding for other uses. BAAQMD approval for the three abatement devices was finally granted on November 24, 2008. Funding for at least two of the three abatement devices has been allocated for installation in FY09.

EMP Closure Summary:

Not applicable at this time.

NOTES / INSTRUCTIONS

FORM FIELD	NOTE
EMP Coordinator(s)	Name the person(s) responsible for the accomplishment of the Environmental Management Program (EMP); That is, overseeing the workplan, monitoring and reporting progress, requesting changes to the workplan as appropriate.
Organization(s)	Name the organization(s) primarily impacted or affected by this EMP. If only one department of an organization is affected, note that department.
Revision Date	Date that identifies when EMPs are modified or updated.
EMP Number	Number will be assigned by the EMS Manager.
Aspect	The significant aspect (e.g. energy use, chemical usage).
Objective	Focusing on the impacts related to this significant aspect, state the goal. What is it you want to achieve? Use action words (e.g., reduce, improve, control).
Target	State “how much and by when.” The target is the performance element and should be quantitative and measurable.
Category	The categories identify and help to focus the EMP. The definitions of these categories are: • Improve: improve the performance in this area • Control: current environmental controls are sufficient, but EMP objective is to maintain and strengthen the level of control • Study: the issue or area has been designated as significant, but historic or baseline data must be studied and compiled to determine the direction of future action
Strategy	In this section, describe the overall approach to the problem. Some of the questions to be addressed include: • How much has or has not been already been accomplished in this area? • Why is this important? Are there relevant drivers (e.g., regulations, directives, public pressure)? • What are the impacts to be addressed in this EMP?
Actions	List the specific actions to be taken to achieve the objective and target. List the action and identify the responsible parties and dates by which the actions should be accomplished.
Metrics	Metrics are the Environmental Performance Indicators, how you measure the accomplishments. List the specific, quantifiable measurements or metrics (e.g., percent of employees trained, kilowatt hours saved, tons of waste diverted, gallons of material).
Comments	Add details to support changes to any of the fields on the form.
EMP Closure Summary	After the EMP and all actions within the EMP are complete, a concise description of the EMP's ability to achieve its objective and target should be provided.