Alan Witthoeft

From: Tamara Zeier [tzeier@projectnavigator.com]
Sent: Friday, October 08, 2010 1:13 PM
To: cochrand@cleanharbors.com; wilesm@cleanharbors.com; Alan Witthoeft; Bill Hodges; Steve Howe
Cc: rogers.anthony@cleanharbors.com; ATKINSON.MARK@cleanharbors.com; greg.sherman@reconservices.com; Tino.Magdaleno@reconservices.com; Robert.Lartz@reconservices.com; Ken Fredianelli; rsanchez@projectnavigator.com
Subject: FW: Ascon - Analysis of proposed truck fleet changes for Air Quality
Attachments: Memo to DTSC_Final.pdf; CL UPGRADE ON 2003 TRUCKS.JPG

All,

Following up on last night's news, below and attached is DTSC's approval of the use of the retrofitted 2003 haul trucks to be used for the Ascon Landfill Site Interim Removal Measure, effective immediately. Just a reminder that we need use 2007 or newer engine haul trucks if they become available. But we can keep these 2003 retrofitted trucks on the project as long as we need, as long as they comply with the MMRP and DTSC's approval in this email.

Alan, Bill – Please file this email and DTSC's attachments as the backup approval documentation for using these retrofitted haul trucks (AQ-2 in the MMRP compliance book).

Please let Steve or me know if you have any questions regarding the retrofitted haul trucks that we are allowed to use on the project.

RECON – Please note that this email only applies to waste haul trucks, and does not change the requirements for the onsite (Tier 3) heavy equipment.

Thanks,
Tamara

-----Original Message-----
From: Eric Maher [mailto:EMaher@dtsc.ca.gov]
Sent: Thursday, October 07, 2010 5:05 PM
To: Safouh Sayed
Cc: Bonnie Wolstoncroft; Greg Holmes; H.Rous@pcrnet.com; Tamara Zeier
Subject: Analysis of proposed truck fleet changes for Air Quality

We have completed the analysis and determined that no significant impacts under CEQA will resulting from the proposed fleet changes.

The cause of the need for fleet adjustment was a need to change to"end dump" trucks for hauling as a result of liners ripping causing trucks to require additional decontamination. In order to obtain the number of end dumps needed it was necessary to consider the use of the retrofitted 2003 engine vehicles in addition to the existing 2004 or newer vehicles already committed to the project. Other 2004 or newer vehicles were not available.

Following analysis, it was determined that the fleet adjustment would not result in a substantial increase in NOx emissions from that previously modeled for the site. The existing mitigation measures will continue to mitigate this fleet adjustment to a level of less than significant and no new monitoring requirements will be required. All existing mitigation measures will continue to be enforced as written and the use of 2003 vehicles will be logged.

The 2003 engines retrofitted will be construed as 2004 pursuant to Federal law with the exception of no special exclusion from the existing requirements for NOx emissions in the Mitigated Negative Declaration.

Other emissions types were not increased to a level of significance requiring new mitigation.

Because this new analysis assumed the worst case of 100% of the fleet being the 2003 retrofit engines, there is no limit on the number of these vehicles used as long as the existing mitigation measures continue to be implemented. The action will be consistent with the analysis in the attached PCR memo.

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Memorandum

TO: Department of Toxic Substances
CC: Project Navigator, Ltd
FROM: Heidi Rous, CPP
RE: **ASCON HAUL TRUCKS**

DATE: October 7, 2010

Recently, Project Navigator, Ltd. (PNL) staff, acting on behalf of the ASCON Responsible Parties (RPs), requested clarification regarding the use of haul trucks to meet Mitigation Measure AQ-2 from the Mitigated Negative Declaration (MND) prepared and adopted by the DTSC for the Interim Removal Measures (IRM). As requested, this Memorandum presents a brief discussion of the issue and the practical impact of allowing the specific trucks to be used for the IRM.

I. ALLOWABLE EMISSION STANDARDS

The United States Environmental Protection Agency (USEPA) has primary jurisdiction over mobile sources of pollution, due to the federal government's role in overseeing interstate commerce. Recognizing that mobile exhaust emissions contribute substantially to ambient levels of air pollution, the USEPA has established exhaust emission standards from heavy duty diesel trucks, defined as those over 14,000 pounds gross weight, for various pollutants including the ozone precursors oxides of nitrogen (NOx) and hydrocarbons (HC). These standards have become increasingly more stringent in recent years, as shown in the table at the following URL: http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm. In summary, these emission standards have decreased the maximum allowable NOx emissions for new vehicles by approximately 80 percent in the last 25 years from 10.7 grams per brake horse power hour (g/bhp-hr) for model years (MY) 1985 through 1989, to 4.0 g/bhp-hr for MY 1998 through 2003, to 2.4 g/bhp-hr for MY 2004 and newer (the 2.4 g/bhp-hr standard applies to emissions of NOx and non-methane hydrocarbons, NMHCs, combined).

II. IRM EMISSIONS AND MITIGATION MEASURES

The EMFAC2007 model was used to calculate emissions from on-road sources, such as the haul trucks, to be used during the IRM activities. The fleet mix contained in the EMFAC2007 model is derived from actual vehicle registration data obtained from the California Department of Motor Vehicles (DMV) for heavy duty haul trucks. The EMFAC2007 model generates composite emission factors based on the performance (emission standards) specific to each vehicle model year, with older trucks emitting more pollutants than newer trucks per mile traveled. Unmitigated on-road haul truck emissions calculated for the IRM were based on vehicle registration data and a fleet mix of model years 1965 through 2010.

In order to reduce emissions from on-road emissions, a mitigation measure (MM AQ-2) was included in the MND requiring haul trucks to be MY 2004 or newer. The USEPA emissions standards, as discussed above, limit emissions to 2.4 g/bhp-hr for those MYs. It should be noted that MM AQ-2 also requires

MY 2007 and newer haul trucks be used as available; however, only the particulate matter emission factor is more stringent for 2007 and newer MYs, and the NOx emission standard remains equal to the 2003 MY standard. With implementation of the mitigation measure, emissions from on-road haul trucks were reduced 64%, from 331 pounds per day (lb/day) to 120 lb/day of NOx. It should be noted that even with this mitigation measure total daily emissions from the IRM (on- and off-road sources) were calculated to be 218 lbs/day, well above the SCAQMD's CEQA significance threshold of 100 lb/day for NOx. Therefore, MM-AQ3 was included, requiring the RPs to purchase and retire NOx credits for all emissions above the 100 lb/day threshold, lowering the impact to less than significant. A Mitigation Monitoring and Reporting Plan (MMRP) was developed requiring documentation that all haul trucks were verified to meet the requirement of MY 2004 or newer.

III. COMPLIANCE WITH THE MMRP

Recently, PNL has inquired about the use of trucks that have been certified to a not to exceed (NTE) limit of 2.8 g/bhp-hr, in lieu of the 2004 standards of 2.4 g/bhp-hr. These truck engines bear a label stating its Compliance Level (CL), see attached. Research has established the USEPA recognized that engine manufacturers may encounter difficulties meeting the 2004 standards in time, and allowed engines which met certain requirements to be brought to market in 2004 and beyond.[1] Thus, the trucks certified to these CLs are lawfully operating as "2004 and newer" trucks, but at the higher (permissible) emission rate.

Each haul truck certified to the NTE limit of 2.8 g/bhp-hr would result in an increase in emissions of approximately 16.7% as compared to those calculated to occur from a truck certified to the stricter 2.4 g/bhp-hr standard. The use of trucks operating at this CL would result in mitigated on-road emissions increasing a maximum of 19 lbs/day from 120 lbs/day to 139 lbs/day, with total IRM emissions increasing from 218 lbs/day to 237 lbs/day, a maximum potential increase of approximately 9%. Given the uncertainties and broad assumptions inherent to exhaust emission calculations, this difference is not considered substantive. It should be noted that this conservative worst-case estimate is based on all haul trucks operating at the higher (less stringent) standard. However the RPs remain committed to using 2004 and newer trucks (2007 and newer as available), and based on communication from the hauling contractor, estimate approximately half the ASCON IRM fleet would be certified to the lower (more stringent) level.

The MND air quality analysis resulted in a less than significant impact with implementation of the prescribed mitigation measures. If trucks certified to the CL are used for the IRM project, additional NOx credits may need to be purchased, based on actual activity levels. Usage logs would need to

[1] http://www.epa.gov/otaq/regs/hd-hwy/ncp/r02021.pdf

indicate which trucks are associated with the higher emission factor and calculations should incorporate the different emission factors.

IV. CEQA IMPLICATIONS

The use of CL trucks would result in a nominal increase in emissions as compared to MY 2004 or new trucks, as described above. By using such trucks, the project would still implement Mitigation Measure AQ-3 in the same manner as presented in the MMRP to ensure that potentially significant air quality impacts are reduced to a less than significant level. The use of these trucks will not materially alter the impact findings regarding air quality presented in the Final MND in that there would be no new significant impacts and no substantial increase in the severity of impacts regarding air quality would occur compared to those impacts previously identified in the Final MND. Therefore, no further CEQA action is recommended to address this issue.


CATERPILLAR®
Compliance Level (CL) = 2.8 NTE
(GM/HP-HR)
This CL supersedes the CL shown on the emissions label on this engine.
235-3409