



WASTE MANAGEMENT

Public Affairs
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February 1, 2013

CalEnviroScreen
c/o John Faust Chief, Community Assessment & Research Section
Office of Environmental Health Hazard Assessment
1515 Clay Street, Suite 1600
Oakland, CA 94612

Email: John.Faust@oehha.ca.gov

**Subject: Second Public Review Draft of the California Communities
Environmental Health Screening Tool (CalEnviroScreen)**

Dear Mr. Faust:

Thank you for the opportunity to comment on the subject document. We understand that the comments are due by COB on Friday, February 1, 2013. Although Waste Management (WM) would have preferred more time to prepare our comments on this document, we will point out key areas of concern that we have identified thus far. WM is also a signatory to a letter prepared by the Solid Waste Industry Group (SWIG). We will not repeat those comments here, but wish to incorporate those concerns by reference.

WM is the leading provider of comprehensive waste management and environmental services in North America. The company serves approximately 21 million municipal, commercial, industrial and residential customers through a network of 390 collection operations, 352 transfer stations, 266 active municipal solid waste (MSW) landfill disposal sites, 5 hazardous waste management facilities, 95 recycling facilities, and many other waste and recycling facilities and services. Many of these facilities operate in California including the Kettleman Hills Facility located in Kings County. This facility provides comprehensive hazardous waste treatment, storage and disposal services for hazardous wastes generated in California. This facility has been the subject of extensive monitoring and numerous evaluations by federal, state and local agencies. None of these studies and evaluations found any evidence that the Kettleman Hills Facility has

any significant or measureable adverse impact on human health, public safety or the environment.

WM is an active and vocal supporter of workable approaches to addressing the problems and concerns of Environmental Justice communities throughout North America. We have taken a progressive and active role in the CIPA workgroup convened by CalEPA as well as the National Environmental Justice Advisory Council (NEJAC) to US EPA at the federal level. We have strongly supported the development of an Environmental Screening tool that can focus appropriate attention and resources on communities that are burdened by environmental and socio-economic stressors.

However, we cannot support approaches, strategies or initiatives that unfairly characterize the impacts of solid and hazardous waste facilities on communities of concern. The focus of this comment letter will be on the use of zip codes, Toxic Release Inventory data, and the mere presence of fully permitted solid and hazardous waste facilities in the CalEnviroScreen tool.

WM's Kettleman Hills Facility is one of the most highly regulated and studied sites in California.

In addition to regular onsite and external monitoring, multiple studies have been conducted examining the potential health risk of WM's Kettleman Hills Facility operations on the local community. These reports have all concluded that the facility does not pose any health risk to local residents.

State of California Birth Defect Study

The state of California recently concluded an investigation of birth defects in Kettleman City and found no connection to the Kettleman Hills Facility. The study read:

"Air tests found no link between the Kettleman Hills Hazardous Waste Facility and environmental contamination in the town. The ground beneath the facility diverts water away from the town, so wastewater from the facility cannot affect the wells that supply the town's drinking water."

PCB Congener Study

A recent study confirmed storage of PCB's at the Kettleman Hills facility has no impact on the local community and the environment. In its findings, U.S. EPA concluded: Concentrations of PCB congeners measured in soil samples collected at the perimeter of the Chemical Waste Management (CWM) Facility are 2,000 times below EPA's risk-

based residential clean-up levels, based on their toxicity. There is no evidence suggesting that PCB congeners from operations at the CWM Facility are migrating off-site at concentrations that would adversely affect the health of local community residents or the environment.

Draft Subsequent Environmental Impact Report (DSEIR) Health Assessment

As part of the state-mandated environmental review process for WM's proposed project, a two-year health risk analysis was completed in 2008 using the EPA/ CARB approved models. The study considered prior soil, surface and air samples, including samples taken both on-site and off-site. The assessed risks in Kettleman City were at least 30 times lower than the California EPA and the local Air District targets. The results also indicated that emissions from the proposed project, in conjunction with other projects at the facility and the existing environment, do not — and will not — pose a public health concern in Kettleman City or Avenal.

Community Health Assessment

A community health assessment report also was conducted by Human Capital Management Services and presented to the Kings County Community Development Agency and Kings County Health Department. The report found that socio-economic factors, along with education and lifestyle factors contribute to the health status of Kettleman City and Kings County residents. The report concluded that there is no epidemiological evidence that residents' poor health is related to environmental exposure from the Kettleman facility. The report also highlights opportunities for improving the health of Kettleman City residents through coordination of health care services, education and skill development, and community resources.

These studies clearly provide the most compelling documentation that the KHF does not have any significant human health, public safety or environmental impact on the Kettleman City Zip Code. Yet, these studies appear to be totally ignored in the application of the CalEnviroScreen tool in favor of TRI data, zip code configuration and the mere presence of a highly regulated waste facility. Waste Management strongly recommends that the existence of these types of state-sanctioned detailed studies should override other factors in developing screening values for communities.

Use of Zip Codes

Waste Management believes that zip codes are an extremely poor tool in evaluating impacts on communities of concern. WM believes it is possible and preferable to use geographic radii for population centers rather than zip codes, which vary dramatically in size. WM suggests that any mapping require a radius evaluation as well. For example, EPA's EJ SCREEN allows you to do just that. Further, as listed on Attachment A, many jurisdictions use census tract information rather than zip codes to evaluate Environmental Justice concerns.

Waste Management's Kettleman Hills Facility (KHF) is located about 3.5 miles from Kettleman City, on the other side of a range of hills, with prevailing winds that don't blow towards Kettleman City, but because *KHF is in the same ZIP code* it is deemed to have a significant impact on that community. Had the ZIP code ended further to the east (say, at I-5) the KHF would have no TRI impact or facility proximity impact.

Waste Management is not alone in its concern over the use of zip codes for this purpose. The EJ community comments submitted to CalEPA,

<http://www.oehha.ca.gov/ej/pdf/103012/CEJAComment.pdf> (p. 3)

clearly state strong opposition and concern with the use of zip codes. They strongly condemn use of zip code and recommend census tracts instead. See also the attached article by Maantay pp. 19, 32-33 (Attachment B). Similarly, Michael Gerrard's authoritative book on EJ (The Law of Environmental Justice: Theories and Procedures to Address Disproportionate Risk, Second Edition) roundly condemns the use of zip codes in favor of census tract data.

USEPA's most current EJ identification tool uses distance rather than zip code. This indicates their methodological preference for the use of radii to characterize the burden of a pollution source. Here is their description of how to use the tool they built to define an EJ community to evaluate.

<http://epamap14.epa.gov/eimap/help/help.html?tab=4>

A large drawback of setting community boundaries using zip codes is that the population residing in the same zip code as a facility emitting pollutants may not be coextensive with the population actually affected by the facility. Because some facilities are located near the boundary of a zip code area, residents located in a neighboring zip code area may have suffered greater risks or harms from the facility. This is particularly true where the cross-boundary population in the direction that a potential air emission

or effluent plume is likely to move. In addition, the geographic and population size of zip code areas varies significantly, reducing the usefulness of a zip code. On the other hand, census tracts are much more suitable than zip codes:

- Census tracts vary less in population size than do zip code areas, thus decreasing need for standardization or other weighting techniques to make data between different units comparable.
- Census tracts are defined in part by community members to resemble more closely homogeneous neighborhoods than do zip codes.

A Comparison of Two Zip Codes

A simple comparison of two California zip codes highlights the above points:

- Zip Code 93239 – Kettleman City (Attachment D)
- Zip Code 93206 – Buttonwillow (Attachment E)

Both of these zip codes include similar small towns that are near to the state's two largest hazardous waste facilities. See Attachment C for a comparison of these two zip codes.

However, in the case of the Buttonwillow Zip Code 93206, the centroid of the Clean Harbors Buttonwillow hazardous waste facility is located about 7 miles from the center of the small town of Buttonwillow and just outside of the zip code – even though the mailing address and shipping address for the hazardous waste facility uses Zip Code 93206:

<http://www.cleanharbors.com/locations/index.asp?id=53>

In the CalEnviroScreen tool, Zip Code 93206 is not affected by the nearby hazardous waste facility, nor by the facility's TRI emissions. This is despite the fact that there have not been any of the comprehensive studies conducted at this facility that have been conducted at KHF documenting the absence of any adverse community impact.

In the case of Kettleman City Zip Code 93239, the centroid of the Kettleman Hills hazardous waste facility is located about 5 miles from the center of Kettleman City. The KHF is located within the Zip Code 93209 and uses this zip code for mailing and deliveries just as does the Clean Harbors Buttonwillow Facility near Zip Code 93206. However, the CalEnviroScreen tool imposes the full weight of TRI releases and proximity to a nearby hazardous waste facility in Zip Code 93239– completely different from the

manner in which the Clean Harbors Buttonwillow facility is treated with respect to Zip Code 93206.

As stated previously, the raw zip code data is not appropriate for evaluating or ranking communities of concern. A more preferable approach is using census tracts and radii to credible sources of human health, public safety or environmental burden.

Toxic Release Inventory (TRI) Data

WM understands that the use of TRI data has been modified to include only TRI releases to air and water. WM is supportive of such a modification. Thus, the permitted land disposal of hazardous waste that is reported by USEPA as a “release” under the TRI would not be used as a release in the CalEPA Screening tool. However, this modified TRI approach is not clearly articulated in the TRI pages of the screening tool (10, 33-36) – except in the “Indicator” sentence on page 33 that refers only to releases to air and water as does the map on page 35. WM would very much appreciate receiving assurances that the use of TRI data in the screening is only limited to releases to ambient air and water, not permitted disposal to land.

Further, as discussed above, 93239 Zip Code (Kettleman City) seems to be highly effected by TRI data and WM is not aware of another TRI site except the Kettleman Hills Facility (KHF) in or even near this zip code. Other than the Kettleman facility, the only other nearby TRI site is the Lemoore Naval Air Station that is not even close to this zip code. This can be verified by using EPA’s EJ View tool,

<http://epamap14.epa.gov/ejmap/ejmap.aspx?wherestr=Kettleman%20City%2C%20CA>.

The KHF does not have any significant TRI releases to air or water, only land disposal, which we believe should not be counted here – yet Zip Code 93239 is highly impacted by TRI releases.

By way of comparison, WM also looked up the zip code for the Clean Harbors Buttonwillow Facility (93206). There does not appear to be any TRI release in this zip code. As discussed above, this appears to be a clear artifact from the simplistic use of zip codes to assess community impacts.

WM understands that the metric OEHHA is using involves hazard-weighted pounds of chemicals emitted to air and water. However, in the case of the Kettleman Hills Facility, there were zero TRI releases to water. Secondly, the Kettleman Hills Facility air

“release” numbers are calculated use highly conservative estimates -- *not* actual measurements of TRI chemicals in ambient air.

Although Kettleman Hills emitted an average of only ~57,000 pounds of conservatively estimated TRI releases (to air only) of various constituents averaged over the 2008-10 time frame, this apparently becomes ~ 39 million hazard-weighted pounds to air over the 2008-10 time frame – a 680 fold increase in burden. The apparent reason that the ~57,000 pounds of TRI estimated air releases becomes ~39 million hazard-weighted pounds is due to the nature of the chemicals being emitted. For example, Kettleman Hills released a very small amount of PCBs which have a very high toxicity weight according to the hazard scoring you used – US EPA’s Risk-Screening Environmental Indicators (RSEI).

The Risk-Screening Environmental Indicators (RSEI) project was created by EPA to provide a more complete assessment of the information contained in the TRI. The EPA Office of Pollution Prevention and Toxics processes the TRI data on the quantity of each chemical reported released by each facility to create the RSEI (for details, see <http://www.epa.gov/oppt/rsei> and OPPT 2004). The EPA combines three methods to assess the human health risks posed by each release:

- (1) fate and transport, or how the chemical spreads from the point of release to the surrounding area;
- (2) toxicity, or how dangerous the chemical is in terms of chronic human health effects on a per-pound basis; and
- (3) population exposure or how many people live in the affected areas.

These values are referred to as facility “RSEI scores,” an estimate of the total human health hazard due to contributions of individual chemicals to the facility’s total score.

The USEPA RSEI uses the following to calculate the hazard results for the TRI: Hazard-based results = SUM (Pounds by chemical x Toxicity Weight of chemical). The toxicity weights used in TRI are found in technical appendix A to the RSEI:

<http://www.epa.gov/oppt/rsei/pubs/index.html>)

Waste Management would like to point out the NEJAC criticisms of the inadequacy of using TRI data that may be found at:

<http://www.epa.gov/environmentaljustice/resources/publications/nejac/ej-screening-approaches-rpt-2010.pdf>:

- Federally collected data that are available at the national level do not adequately capture a number of activities within and conditions endemic to environmental justice areas.
- It omits significant sources of environmental justice concern, primarily impacts from facilities and land use activity that occurs without air permits required under the federal programs or activities exempt from TRI reporting.
- TRI does not consider: Clean Air and Clean Water Act minor facilities, Clean Water Act “nonpoint” sources, Clean Air Act mobile sources, small quantity generators of hazardous waste, underground tanks, closed or abandoned facilities and remedial sites, significant releases of toxic air contaminants that are not reported under TRI (because the facility is exempt, or because the chemicals are not listed or are released in amounts that do not trigger reporting requirements), and facilities exempt from permits because of small size, grandfathering, exempted status.
- Only selected industrial sectors or polluting activities (limited to 23,000 facilities in the U.S.) and selected chemicals (approximately 650 at present) are included in TRI.
- Within the selected sectors and activities, facilities with fewer than 10 full-time employees are exempt from reporting.
- Facilities releasing toxics each year at levels under the reporting threshold set for an individual chemical (or in a form different than that designated for reporting - in dust or fibrous form, for example) are exempt from reporting.
- Limitations on regulation and data gathering obligations authorized under federal environmental statutes (e.g., grandfather clauses, toxic materials sent for recycling without intervening processing) will transfer to limits on TRI data.
- As a result, (of the above factors) many facilities and activities of concern to environmental justice communities will not be captured in the TRI/RSEI data.

WM understands that in regards to the Clean Harbors Buttonwillow facility, the average hazard-weighted pounds for 2008-10 are 21,967,170. OEHHA treats the facility as being located in the 93251 census ZIP code (OEHHA address: 2500 W Lokern Rd. McKittrick, CA 93251), which is just West of the Buttonwillow ZIP code, 93206. However, as noted above, the website for the Clean Harbors Buttonwillow Facility actually cites the 93206 Zip Code. Regardless, the end result is that the OEHHA has treated the Clean Harbors

Buttonwillow Facility as being outside of the 93206 ZIP Code and, thus, the TRI values for this facility or proximity of a hazardous waste facility were not assigned any value to the Buttonwillow Zip Code. Because of the Zip Code differences in the vicinity of Kettleman City and those in the vicinity of Buttonwillow, one hazardous waste facility is shown as having a significant burden on Kettleman City while the other similar hazardous waste facility is shown as having virtually zero impact on Buttonwillow. This does not appear to be a fair and rationale assessment to WM.

Proximity to Solid and Hazardous Waste Facilities and Double Counting

Proximity to Solid and Hazardous Waste Facilities, along with a 250-meter buffer (pages 10, 52-59) have been broadly included as an Environmental Effect risk factor (along with toxic cleanup sites, impaired water bodies, and groundwater threats from USTs). Why are solid and hazardous waste facilities included here, yet no other permitted industries (refineries, chemical plants, power plants, etc.) are similarly included? Solid and hazardous waste facilities are permitted to have minimal releases to the ambient environment, while many other types of industries are well known to have much greater permitted releases to the ambient environment (air and water). It is not clear from the report why solid waste and hazardous waste facilities are singled out for inclusion in this fashion, while other known emitting industries are not.

In the case of hazardous waste facilities, such as Kettleman and Clean Harbors Buttonwillow, that have small amounts of TRI releases to the ambient environment (Air only in the case of Kettleman), it would seem that using TRI releases in addition to separate consideration of proximity to the facility itself is double-counting. Unlike other industrial facilities, hazardous waste facilities with TRI releases are also scored by CalEnviroScreen simply due to the existence of the hazardous waste facility itself. No refineries, chemical plants, plastics manufacturing, gravel/cement plants, etc with known releases to the environment are similarly included – or similarly double-counted.

The report includes a broad statement on page 52 regarding “limited information on exposure” for solid waste and hazardous waste facilities. Is this really true? Most of our solid waste and hazardous waste facilities have had extensive permitting requirements for groundwater and/or stormwater monitoring for many years and many have air-monitoring data as well. As pointed out above, the Kettleman Hills Facility has decades (and millions of dollars) of monitoring, studies, health risk assessments, etc. that have clearly documented that there is no environmental exposure outside of KHF.

WM understands and appreciates the fact that solid and hazardous waste facilities, along with other indicators in the “Environmental Effects” factor are scored at only 50% of the value of the Exposures factor. However, it is still not clear why solid and hazardous waste facilities are even included with these contaminated sites. Should not proximity to all permitted industrial facilities that handle materials of concern or have emissions be similarly included? Why single out permitted solid and hazardous waste facilities? Solid and hazardous waste facilities could have TRI releases and thus be captured by that route. Simply because many of them (particularly solid waste facilities) don’t have TRI releases, then they are further punished by being included in CalEnviroScreen simply because of their existence – even though there may not be any exposure pathway that would justify such inclusion.

Finally, with respect to the solid and hazardous waste facility 250-meter buffer, it is not clear how it is applied. 250 meters from what? The facility property boundary? The facility permitted waste handling unit? Some facilities may already have extensive buffer property surrounding the facility. Other facilities may have minimal or no such buffer property. Adding a 250 buffer may only make sense if it is applied at the boundary of the permitted waste handling area – certainly not at the property boundary.

Recommendations

Inclusion of waste facilities should be narrowed to only those that are known to pose a threat to human health, public safety or the environment – truly in a manner consistent with cleanup sites, groundwater threats and impaired water bodies that are also known to pose an environmental effect. Otherwise, they should be treated as any other industrial site (refineries, chemical plants, power plants, etc) – based on the proximity to exposures measure through ozone, PM, pesticides, ambient TRI releases, and traffic density.

We recommend and request that waste facilities be a basis for calculating a CalEnviroScreen score only as follows:

- If there is a TRI, PM, Ozone, pesticide or traffic based release to the ambient environment (air or water) from waste facilities – similar to the manner that burden from other industrial facilities are identified – then solid and hazardous waste facilities should be treated the same. Additional criteria for scoring waste facilities should not be used unless it is applied to other industrial activities.

- The impact of site-specific releases should be based on a radial distance from the site-specific release – not limited to just the zip code in which it occurs.
- We recommend basing the CalEnviroScreen tool on census tract information rather than zip codes.
- Beyond the above factors, do not include waste facilities if there have been well-documented studies or assessments showing that the waste facilities do not have any additional pollution burden on human health, public safety or the environment if those studies have been accepted or authored by a federal, state or local environmental or health agency.
- Beyond the above factors, do not include waste facilities unless there have been one or more appealable violations against the facility for factors that could result in a direct impact on human health, public safety or the environment. OEHHHA and CalEPA also should consider applying this same standard to all industrial facilities in California based on the records of all CalEPA BODs and local air districts.
- Beyond the above factors, the mere existence of waste facilities should not be used as a basis for inclusion in CalEnviroScreen. Only those waste facilities (and other industrial facilities) that are known to have violations resulting in releases to the ambient environment should be included.
- If both TRI and site specific data is used, the CalEnviroScreen tool should recognize and account for the possibility of double counting. Double-counted sites or facilities should have their scores adjusted appropriately.

Please do not hesitate to contact me if you have any questions or wish to discuss these matters further. We would be pleased to meet with you to discuss these matters further.

Sincerely,



Chuck White
Director of Regulatory Affairs/West

Attachments:

- A – States and municipalities using census blocks or tracts
- B--Article by Maantay, “Proximity to Environmental Hazards:
Environmental Justice and Adverse Health Outcomes
- C – Comparison of Zip Codes 93206 and 93239
- D—Map of Kettleman Zip Code 93239
- E—Map of Buttonwillow Zip Code 93202

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