CONCRETE PRODUCTION AND THE REGULATORY ROLE OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

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CONCRETE PRODUCTION AND THE REGULATORY ROLE OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

A Report for the Bayview Hill Neighborhood Association, the Bayview Hunters Point Mothers and Fathers Committee, and Greenaction for Health and Environmental Justice

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On behalf of several grassroots community groups, the Environmental Law and Justice Clinic at Golden Gate University School of Law issues this report to publicize the Bay Area Air Quality Management District’s permitting and enforcement practices that insufficiently protect the public against harmful air pollution, including particulate matter (PM) and toxic air contaminants.

The Clinic’s investigation focused on the Air District’s oversight of three companies operating on Port of San Francisco-owned properties at Piers 92 and 94 in the City of San Francisco: CEMEX Construction Materials Pacific, LLC (CEMEX), Central Concrete Supply Co., Inc. (Central), and Hanson Aggregates Mid-Pacific, Inc. (Hanson). CEMEX and Central operate concrete batch plants, and Hanson operates sand and aggregate offloading facilities. The Clinic’s findings, however, may extend beyond the three companies to the Air District’s practice for all pollution sources in its nine-county jurisdiction.

Credit: Created from Map Data ©2019, CNES/Airbus, Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency. Map of Piers 92 and 94 and nearby neighborhoods created using Google Maps. The three companies discussed in this report are marked in orange. The nearest public housing is marked in green. The nearest playground areas for children are marked in purple. The line at top in maroon measures 0.258 miles and is located there for reference.
EXECUTIVE SUMMARY

The Air District regulates concrete batch plants and sand and aggregate processing facilities because harmful air pollution, including toxic air contaminants and fine particulate matter (PM$_{2.5}$), is emitted in the production process. Some of these facilities operate in violation of Air District rules, either by emitting pollution without permits or by violating permit limits. Unquestionably, the facilities bear the responsibility for violating the law. The Air District, however, is also independently responsible to ensure that its permitting and enforcement programs properly regulate emissions from these companies.

We make several findings about the Air District’s permitting and enforcement programs, following up on a report we published in 2017.1 Many of the findings contained in that report still hold true, even though the Air District was made aware of the findings in 2017 when we published the report.

THE AIR DISTRICT ALLOWS POLLUTION SOURCES TO OPERATE WITHOUT THE REQUISITE HEALTH RISK ASSESSMENT BECAUSE THE DISTRICT ALLOWS THEM TO OPERATE WITHOUT PROPER PERMITS.

Pollution sources are generally required to apply for and receive a permit from the Air District before they begin operating or increasing production. A proper permitting process would determine whether a facility poses a health risk to the community. Where a source poses unacceptable health risks, the source would be required to reduce risks or be denied a permit. Rather than requiring the pollution sources to wait for a permit, however, the Air District allows them to operate without a permit while their permit application is pending. Examples include the Air District’s treatment of CEMEX and Hanson. CEMEX received a permit despite an incorrect health risk assessment, a finding we highlighted in 2017. CEMEX still operates under the same flawed permit and has also increased production without authorization from the Air District. Similarly, Hanson is operating without a permit and has done so since 2001, as highlighted in the 2017 report.

COMPounding the harm, the air district has unduly delayed its permitting decisions. This delay allows polluters to emit toxic air contaminants that can cause cancer and other diseases without the necessary evaluation of pollution reduction measures to reduce risks to workers and nearby residents.

Pollution sources are responsible for submitting a complete permit application. When the Air District finds a facility operating and emitting air contaminants without a permit, the Air District rules specify that the polluter must submit a complete permit application within 90 days of being notified. The District fails to enforce the rule requiring the facility to submit a complete permit application within 90 days. Rather, the District allows the applicant multiple opportunities to cure any information gap. Because of this practice, the District consistently allows for an extended period of back-and-forth with the permit applicant when it has failed to submit information sufficient for the District to make a permitting decision. For some facilities, this endless loop has resulted in no permit being
issued for years. In the meantime, these companies continue to operate and pollute without appropriate emission limits.

For example, CEMEX’s permit application requesting an increase in its production has been pending for more than three years. During this time, CEMEX increased production without the Air District’s authorization and without analyzing the potential health risks to the public.

**THE AIR DISTRICT’S ENFORCEMENT OF PERMIT VIOLATIONS IS NEITHER TIMELY NOR APPROPRIATE, WHICH RESULTS IN CONTINUING VIOLATIONS.**

The Air District deliberately delays the commencement of any enforcement action until the District’s permitting unit has acted on a permit application, which may take years as illustrated by the CEMEX and Hanson examples. Moreover, when the Air District finally takes an enforcement action for permit violations, it settles for nominal penalties.

The violations highlighted in the 2017 report remain unresolved except for Central’s case, in which the District settled the permit violations for $9,000. In the permitting process, the District required Central to reduce health risks from the previously unpermitted equipment by increasing the height of its exhaust stacks but did not require Central to undertake any additional mitigation measures to make up for the harm the intervening years of excess pollution may have caused.

**BACKGROUND**

**Community Concerns About Health Risks from Concrete Production**

Nearby residents of the Bayview and Hunters Point neighborhoods are concerned about the health impacts of air pollution emitted by concrete production at Piers 92 and 94 in the City of San Francisco. Concrete batch plants emit PM, including PM$_{2.5}$, from ingredients used to mix concrete during the transfer, storage, and processing phases of the operation.$^2$ Other facilities unload sand and aggregate and store them in stockpiles. Residents have long been concerned about the material piled up as high as hills that serve as sources of visible PM emissions. Material handling, idling diesel trucks, and truck traffic through unpaved roads also cause PM emissions.

Concrete is typically made from cement, coarse aggregate, and sand, mixed with water.$^3$ Some plants measure and transfer the ingredients into mixer trucks, which combine these ingredients on the way to the job site. Alternatively, concrete may be manufactured in a central mixing facility and then transferred to trucks for transport. Fly ash, a powdery substance produced as a waste product from burning coal, is used in concrete for hardening the material.$^4$ In addition to being a source of PM, fly ash can also contain toxic air contaminants such as arsenic, chromium, and selenium.$^5$ Arsenic and hexavalent chromium are both confirmed human carcinogens; selenium is a probable human
carcinogen. Hexavalent chromium also irritates the respiratory system and causes allergies, which can result in breathing difficulties.

Particulate matter consists of small particles and aerosols that can penetrate deep into the lungs and bloodstream. PM emissions are linked to significant health problems including aggravated asthma, decreased lung function, heart attack, and premature death.

PM$_{2.5}$ exposure is particularly serious for children, the elderly, and people with heart or lung disease, asthma, or other chronic illnesses. The Bayview-Hunters Point neighborhood has the highest hospitalization rates and the highest number of emergency room visits from asthma in the City of San Francisco, more than four times those of a comparable area in the western part of the City. The occurrence of chronic obstructive pulmonary disease is equally high.

The CEMEX, Central, and Hanson operations are located in an area that is already heavily polluted. Piers 92 and 94, which are owned by the Port of San Francisco and leased to these three companies, are near the India Basin and Bayview-Hunters Point neighborhoods of the City of San Francisco. These areas have a large number of PM pollution sources – both stationary sources (e.g., concrete batch plants) and mobile sources (e.g., trucks and automobiles).

Other nearby sources of environmental hazards include industrial operations – current and historic – as well as a Superfund site that has received widespread attention for its radiological contamination. Residents are also exposed to PM pollution from U.S. Highway 101, Interstate 280, and the maritime activities and bus storage depots at the Port of San Francisco. As a result, Bayview, Hunters Point, and the neighboring census tract have a 31 percent higher PM$_{2.5}$ rating and a 99 percent higher diesel PM rating than the average census tracts in California.
CalEPA has designated the area marked in red in the map on the previous page, south and southeast of Piers 92 and 94, as a “disadvantaged community” under state law, i.e., a place disproportionately burdened with pollution and other hazards that have health impacts.16

The Air District also recognizes the heavy pollution burdens these neighborhoods bear. In its Community Air Risk Evaluation (CARE) program, the District has specifically designated eastern San Francisco, which includes the area where Piers 92 and 94 are located, as an area that is disproportionately impacted by air pollution, also known as a “CARE” community.17 One of the stated goals of the Air District’s CARE program is to “[e]valuate health risks from multiple sources of air pollution – that is, evaluate cumulative impacts of sources in combination.”18 However, the Air District fails to take into account the cumulative impact of sources in combination because its permitting rules generally classify an application for a proposed new or modified source as a “ministerial” project exempt from review under the California Environmental Quality Act (CEQA).19
Adding to the concerns about localized air pollution, the regional air quality in the San Francisco Bay Area is not at a health-protective level. With respect to PM pollution, a major focus of this report, the Bay Area is classified as nonattainment for the state PM$_{10}$ standards (both for annual and 24-hour) and nonattainment for the state PM$_{2.5}$ annual standard.\textsuperscript{20} This nonattainment status means that the Bay Area’s air quality is worse than the standard that the State of California set to protect public health.

Significantly, studies have found that attaining the air quality standards does not necessarily mean that health-protectiveness is assured. Even at the lowest observed concentrations, PM$_{2.5}$ is responsible for increased number of deaths or lowered life expectancy.\textsuperscript{21} In other words, PM$_{2.5}$ can be unsafe at any level, and thus actions to reduce its levels and concentrations are beneficial to public health. Moreover, PM$_{2.5}$ health impacts are worse for areas with higher poverty like some parts of eastern San Francisco, including the Bayview-Hunters Point neighborhood.\textsuperscript{22}

The Air District’s Permitting Requirements

A business must obtain necessary air permits from the Air District before beginning to build, install, operate, or replace any article, machine or equipment that may generate air pollution.\textsuperscript{23} This permitting process exists so that the Air District can ensure that health risks are reduced where appropriate and can limit or control emissions through a permit condition. Such conditions may include requiring either process changes or the installation and operation of pollution reduction equipment. Moreover, a permit serves not only to allow the business to know its compliance requirements, but also to inform the Air District and members of the public so that they can enforce the permit.

In theory, the Air District’s rules provide for a relatively quick process for the District to determine whether a permit applicant has submitted sufficient information for a permitting decision and to set conditions for construction and operation. The District typically must review whether an application is complete within 15 days.\textsuperscript{24} If the permit application is complete, the Air District must notify the applicant within 35 working days that the permit is approved, approved with conditions, or denied.\textsuperscript{25}

If the Air District determines that the permit application is not complete, the District must notify the applicant, specifying the additional information needed.\textsuperscript{26} If the applicant fails to submit the information requested within 90 days, the Air District has the authority to cancel the permit application.\textsuperscript{27}

An Air District rule imposes additional requirements for new or modified sources that may increase toxic air contaminants. For these sources, the District is required to: (1) evaluate the potential public exposure and health risks associated with a proposed project; (2) mitigate potentially significant health risks resulting from these exposures; and (3) provide net health risk benefits by improving the level of pollution control.\textsuperscript{28} When an applicant applies to modify a source by an increase in throughput (i.e., the amount of material a source processes) that may result in an increase in toxic air contaminant
emissions, the application is required to either include a Health Risk Assessment or provide the information for the Air District to conduct a Health Risk Assessment. For a concrete batch plant requesting a throughput increase, the permit application must include a calculation of the projected PM and toxic air contaminant emissions that will result from the increase. The Health Risk Assessment will analyze whether the project risk (i.e., the health risk resulting from the emissions of toxic air contaminants from the project) exceeds the rule’s toxic air contaminant trigger levels. If the project risk presents a cancer risk greater than 1 in a million or a chronic hazard risk greater than 0.2, the applicant must apply best available control technology for toxics. The Air District must deny a permit for a new or modified source if the project risk exceeds the trigger levels, unless the applicant can reduce the risk.

### Permitting Process According to the Rules

- **Submit Application**
  - Submit an application to obtain a permit.
  - Apply before constructing or modifying sources of pollution.
  - The application package should contain the required information.

- **Within 15 Days**
  - The Air District reviews whether the application is complete.
  - If the application is incomplete, the Air District seeks more information from the applicant.
  - If information is still incomplete 90 days after the last step, cancel the application.

- **Within 35 Days**
  - The Air District grants or denies the permit.
  - Permits typically will have conditions for construction and operation of a pollution source.
  - Begin construction of a new source and operate it. Notify the Air District if any planned changes may increase emissions.

After an air pollution source begins operation with proper permits, the source is required to notify the Air District within thirty days of changes in throughput that “might increase emissions.” Moreover, in addition to complying with the permit’s conditions, the permittee is required to operate the source in conformance with any representations made or information submitted to the Air District in connection with the permit application if such representations or information were material to the Air District’s permitting decision.
THE AIR DISTRICT’S PRACTICES

Our review of publicly-available records and meetings with the Air District reveals that its permitting and enforcement practices have not changed since the publication of the Clinic’s 2017 report and the media attention the report garnered.

The Air District Allows Pollution Sources to Operate Without Proper Permits and Health Risk Assessments.

Applications from 2016 and 2017 are still under review at the Air District. Meanwhile, Hanson continues to operate without a permit.

Hanson currently operates a sand offloading facility at Pier 92 and an aggregate import terminal at Pier 94. Hanson has operated without an Air District permit at Pier 94 since 2001.

In April 2016, the Air District issued a Notice to Comply, alleging that stockpiles of materials at Hanson’s Pier 94 facility had less than five percent moisture content by weight. The Notice to Comply stated that Hanson could achieve compliance by submitting a permit application and required Hanson to comply by May 10, 2016. In May 2016, Hanson finally applied for permits for its Pier 94 facility.

Hanson also applied in August 2017 for permits for its Pier 92 facility.

As of April 2020, the Air District has not completed its review of Hanson’s permit applications. They have been under review.

The Pier 92 permit application is still under review after nearly three years. As of January 2020, its status changed from “Incomplete for Data” to “Evaluating Permit Application Completeness” and, as of April 2020, to “Complete – Application Under Evaluation.” A District representative stated in February 2020 that Hanson had applied for an increase in throughput limits. (As earlier explained, “throughput” refers to the amount of material such as sand used to produce a product.) The Air District apparently regards Hanson’s request for a throughput increase as a “substantive change to its application,” which allows the District to start a new completeness review period again.

The Pier 94 permit application is still “Incomplete for Data,” according to the District.

As a result of the Air District’s practices, facilities like Hanson can circumvent the regulations. In June 2016, Hanson claimed that the sand handled at its Pier 94 facility is exempt from permitting requirements because the moisture content of its stockpiles exceeds 5 percent. It is unclear whether the Air District has verified this practice. Meanwhile, Hanson’s permit applications continue to languish in the Air District’s interminable evaluation process without an evaluation of Hanson’s claims. In short, Hanson
has continued to operate without a permit for decades – since 2001 – in violation of Air District rules.

The Air District has not corrected an improper health risk assessment for CEMEX’s 2014 expansion, exposing workers and nearby residents to excess toxic air contaminants.

In December 2014, CEMEX applied for an increase in concrete production, which required a Health Risk Screening Analysis to estimate the health risks for people exposed to the new emissions of toxic air contaminants. In an analysis on April 15, 2015, the District’s engineer concluded that the acute hazard index for the proposed project was “not acceptable” under District rules, which should have required the District to deny the permit.46

But the engineer was asked by his supervisor to redo the calculations using a different method. In his revised April 24, 2015 memorandum, the engineer stated, “Per your request, we have revised the results of the April 15, 2015 HRSA (Health Risk Screening Analysis) for this application to include your corrections to the hourly emission rate at the existing concrete batch plant.”47 This change resulted in an acute hazard index within the “acceptable” project risk limit under the District rule.48 The District then issued the permit to CEMEX.

In 2016, the District agreed with the Clinic that the revised Health Risk Screening Analysis had applied the wrong formula – that the engineer’s original calculation was correct. The District had thus issued the permit improperly because the revised calculation underestimated the health risks. A District manager informed the Clinic in May 2016 that the District would reexamine the Health Risk Screening Analysis while reviewing another pending permit application, i.e., CEMEX’s application for a throughput increase at Source 14. The Clinic’s 2017 report thus noted that the District had not yet resolved the risk analysis issue. The issue is still unresolved.

After issuing a Notice of Violation to CEMEX four years ago, the Air District is still reviewing CEMEX’s permit application.

On May 2, 2016, the Air District issued a Notice of Violation to CEMEX for failing to meet permit conditions.49 According to the Notice, CEMEX exceeded its 60,000 tons per year throughput limit for Source 14 (barge sand conveyer system and stockpile). In response, CEMEX applied for an increase in throughput in June 2016 to match its actual throughput.50 CEMEX’s application is still in the permit application queue; the District’s website describes its status as being “Incomplete for Data,” nearly four years after the application was first submitted.51

The Air District has allowed CEMEX to increase the amount of material processed without confirming that the increase complies with the District’s rules.

Shortly after the Air District issued the Notice of Violation discussed above for exceeding the throughput limit of 60,000 tons per year, CEMEX submitted a permit application,
requesting approval for a throughput increase for Source 14 to over 389,000 tons per year. According to the Air District's website, the District has not yet approved this throughput increase.

The Clinic’s 2017 report found that CEMEX consistently violated its 60,000 tons per year throughput limit. Three years later, CEMEX continues to violate this permit limit.

In May 2018, the Air District’s inspector reported that CEMEX processed more than five times its permit limit of 60,000 tons per year at Source 14. The inspector’s report noted that CEMEX had submitted a permit application in June 2016 for approval for a throughput increase. As earlier noted, the District considers this permit application as still missing information. That is, the District has not approved CEMEX’s application for a throughput increase at Source 14.

Despite CEMEX's continuing violations, the Air District renewed CEMEX's operating permit in March 2019, again setting the limit at 60,000 tons per year for Source 14.

In other words, the Air District in practice has permitted CEMEX to increase its throughput without confirming that CEMEX meets pollution control standards and without conducting a health risk assessment to evaluate the potential public exposure and health risk of any increase in toxic air contaminant emissions.

CEMEX has thus operated with an improperly issued – and now outdated – permit for at least five years. The District’s permitting delays have allowed CEMEX to emit toxic air contaminant at a level that has created an unacceptable risk to workers and local residents.

The Air District Has Not Properly Exercised Its Authority to Cancel Applications When a Facility Fails to Furnish Requested Information.

The Air District rules allow for a 15-day review period for the District to determine whether it has complete information for a permit decision. In practice, the Air District’s permit process allows for interminable delays because the District’s review of a permit application can get stuck in “completeness review.” For example, when an applicant provides further information after being notified of missing information, the 15-day period restarts for the completeness review. This process results in a back-and-forth exchange between the Air District and the facility because the District apparently allows the applicant 60 days to respond to the Air District’s new request for the missing information.

In some cases, the permitting process remains unresolved for years; the Air District marks the permit application status in such cases as “Incomplete for Data.” However, the Air District already has the authority to prevent an extended back-and-forth between the District and a facility: under Reg. 2-1-309, the Air District may cancel a permit application within 90 days after the District deems an application incomplete if an applicant fails to furnish the requested information.
As demonstrated by the Air District’s treatment of CEMEX’s and Hanson’s permit applications, however, the Air District has failed to exercise this authority.

In CEMEX’s case, the Air District first determined CEMEX’s application as incomplete on June 22, 2016. The Air District had the authority to cancel CEMEX’s application for failure to furnish requested information due to incomplete data within 90 days after June 22, 2016. But the Air District took a different tack: it treated CEMEX’s permit application as if it were a permit. On May 31, 2018, the Air District’s inspector stated that CEMEX’s throughput was over 323,000 tons per year, exceeding its permit limit of 60,000 tons per year of sand. However, the District did not issue an order to compel compliance with the actual permit limit. Instead, the District’s inspector simply noted that CEMEX had submitted a June 2016 permit application requesting authority to increase its throughput. Notably, even now, the Air District’s permitting database denotes CEMEX’s permit application as being “Incomplete for Data.”

Similarly, Hanson’s permit applications have been pending since 2016 and 2017, as earlier discussed. Even though the Air District deemed Hanson’s application status as “incomplete” for many years, the Air District did not take any steps to cancel Hanson’s application or to issue an abatement order.

In sum, the District’s rules requiring complete information from applicants mean little. Pollution sources can delay the permitting process for years without submitting complete information and without ceasing operation.

The Air District’s Regulations and Procedures Do Not Result in Effective Enforcement and Deterrence.

CEMEX

As discussed earlier, the Air District has allowed CEMEX, since the May 2016 Notice of Violation, to continue to exceed the permit’s throughput limits by more than 240 tons per year without approving the increase. The Air District has so far failed to take action even though CEMEX continues to violate its permit. It will not take action until permitting is complete, according to the District’s practice.

Central

Early last year, the Clinic requested the Air District to provide a status update of the Air District’s Notice of Violation issued to Central in May 2016. The Air District responded that it was attempting to resolve the issue through settlement. This untimely enforcement response reflects the Air District’s ineffective enforcement. Three years after issuing a Notice of Violation, the Air District finally set out to resolve this matter. What caused this inordinate delay? According to the Air District, when a facility receives a Notice of Violation for operating without a permit, the Notice does not get forwarded to the District’s legal division until the permitting issue is resolved. Simply put, the Air District’s undue delays
in permitting lead directly to inexcusable delays in commencing an enforcement action against a violator.

After unsuccessful settlement negotiations, the Air District ultimately filed a complaint against Central on May 29, 2019, alleging three violations of Health and Safety Code and seeking a penalty of $75,000. On August 20, 2019, the Air District settled with Central for a penalty of $9,000. After three years, the $9,000 settlement is insufficient to hold a company accountable for emitting excess PM in the Bayview-Hunters Point neighborhood, which is already designated by the Air District as a CARE community. While the Air District, as part of its permitting process, did require Central in 2018 to increase the height of its exhaust outlet (from 18 inches above the ground’s surface to 25 feet) to reduce health risks from Central’s previously unpermitted equipment, the District’s 2019 settlement did not require Central to undertake any additional measures to mitigate potentially significant health risks caused by Central’s past operations. Such risks include those caused by the years in which Central had operated its facility with an exhaust outlet 18 inches above the ground’s surface. By failing to require mitigation for the harm caused by Central’s past operations, the District’s settlement did not provide a “net health risk benefit” for workers and nearby Bayview-Hunters Point residents as required by Air District rules.

Hanson

As noted, Hanson’s applications are still in the cue at the District. According to the District’s policy, reflected nowhere in the rules, the District has not yet begun any enforcement proceedings for Hanson’s lack of permits.

To be effective, enforcement action must be timely and appropriate to deter violations and promote compliance. As detailed above, the Clinic found that the Air District’s ineffective enforcement policy, combined with current permitting practices, directly results in added environmental burdens and adverse health impacts for the Port’s neighbors in the Bayview-Hunters Point community.
RECOMMENDATIONS TO BETTER PROTECT PUBLIC HEALTH

The Air District’s current permitting approach allows facilities to operate without a permit or to violate the permit limits without consequence. The Air District should adopt practices that conform with its rules as follows.

First, the Air District should process permit applications in a timely manner.74 If a permit applicant fails to provide requested information within 90 days after an application is deemed incomplete, the Air District should exercise its authority to cancel the application,75 which would mean that the permit applicant cannot operate. The Air District’s willingness to cancel applications will not only reduce the logjam in the permitting process, but will also encourage permit applicants to submit complete information in a timely manner.

Second, to prevent circumvention of the rules governing toxic air contaminants, the District’s Health Screening Analysis should properly calculate the emissions from a proposed project, as the rules require.76 The Air District should deny permits for new or modified sources of toxic air contaminants when the project risk or net project risk exceeds the District’s thresholds.77 In addition, the District should require sources of toxic air contaminants that do not hold a valid permit to complete a permit application within 90 days or face suspension or revocation of the invalid permit.78

Third, the Air District should follow its rules to prohibit a facility from increasing its production capacity (i.e., throughput) without first obtaining authorization from the Air District.79 The District should use its authority to revoke the permit of any business that increases its throughput without the District’s authorization.80

Fourth, the Air District should provide a public review process for any project that proposes to increase air emissions in a CARE community because there is a reasonable possibility that the proposed activity will have a significant impact on the environment in a community that is already burdened with excessive air pollution.81 In such a case, the District must consider the cumulative impact of projects in the area over time.82 Currently, the Air District requires public notice and allows for public comment before approving a permit for a new or modified source of toxic air contaminants located within 1,000 feet of a school site.83 The Air District should provide the same type of public notice and comment period for all proposed projects increasing air emissions in a CARE community. The Bayview-Hunters Point community should not be exposed to increased PM and toxic air contaminant emissions from these facilities without the Air District’s prior evaluation of the cumulative health risks. As the Air District’s rule requires, the District must act to mitigate potentially significant health risks resulting from these exposures and must seek to provide “net health risk benefits” to the community through better pollution control.84
Fifth, the Air District should change its enforcement procedure to ensure a timely and appropriate response to violations of Air District rules. When a facility operates without a permit or violates a permit condition, the Air District does not even start its enforcement procedure until the permitting issue has been resolved. This practice is ineffective and should be changed. The Air District’s legal division should work closely with the permitting division to determine the harm caused by the violation. In that way, the Air District’s legal division can promptly determine the appropriate enforcement strategy and course of action, rather than wait until the permitting division has completed its permitting determinations.

Sixth, if settlement efforts are unsuccessful, the Air District should promptly pursue litigation against violators. In resolving enforcement matters, the District’s settlements should include appropriate penalties that reflect the seriousness and duration of the violation, as well as measures to mandate compliance with permit limits and to mitigate the effects of the company’s past violations. The Air District should establish a mitigation fund derived from the payment of penalties in civil and criminal matters. As in the District’s April 2001 settlement with Mirant Potrero, LLC, this mitigation fund could be earmarked for clean air projects to offset the harmful impact of excess emissions caused by violations.
Endnotes

1 Environmental Law and Justice Clinic, Concrete Manufacturers and the Regulatory Role of the Bay Area Air Quality Management District (May 25, 2017), https://digitalcommons.law.ggu.edu/eljc/30/.

2 Based on information the Clinic collected, NBC Bay Area Investigative Unit produced its own analysis: Is San Francisco’s Building Boom Taking a Toll on Poorest Neighborhoods?, NBC Bay Area Investigative Unit, http://www.nbcbayarea.com/investigations/Is-San-Franciscos-Building-Boom-Taking-a-Toll-on-Poorest-Neighborhoods-424196063.html. Separately, a group of high school students working on a science project called, “Street Air” produced a video: Airgregates, https://youtu.be/yqCoSgbyhyw. Footage from both pieces shows the plumes of dust from these facilities. Both groups tested the material collected from the air near the facilities and reported that it included PM2.5.


5 See BAAQMD’s Engineering Evaluation for Central at 2 (June 4, 2018).


11 Id. (Map 5).

12 San Francisco Planning Department, Bayview Hunters Point Area Plan, Figure 4 (last updated June 3, 2010), https://generalplan.sfplanning.org/Bayview_Hunters_Point.htm#BHP_G.


14 CalEnviroScreen 3.0 Results California Office of Environmental Health Hazard Assessment (last update: June 2018)
16 CalEnviroScreen 3.0 Results California Office of Environmental Health Hazard Assessment (last update: June 2018)
https://oehha.maps.arcgis.com/apps/webappviewer/index.html?id=21bcd004d0b5412089d4d9e4427fa6e4&marker=-122.3900739040017%2C37.73493373167816%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%22Spanish%22%2C%22longitude%22%3A-122.3900739040017%2C%22latitude%22%3A37.73493373167816%2C%22isIncludeShareUrl%22%3ATrue%7D&level=10.


19 Reg. 2-1-311.


22 Id. at Abstract, Methods and findings ("At any PM2.5 concentration, life expectancy loss was, on average, larger in counties with lower income and higher poverty rate than in wealthier counties."). Public housing sites in eastern San Francisco that are within the CARE area include Potrero Terrace & Annex, Hunters View, Alice Griffith, and Sunnydale. Hope SF, https://www.hope-sf.org/.

23 Reg. 2-1-301; Reg. 2-1-302.

24 Reg. 2-1-432; Permit Handbook at 2, 5, BAAQMD Engineering Division (2006).

25 Reg. 2-1-408.

26 Reg. 2-1-432. As the BAAQMD’s Permit Handbook explains, deadlines may differ for certain special permit types (e.g., major facility review under Title V). Permit Handbook at 2, BAAQMD Engineering Division (2006).
Reg. 2-1-309. The rule also allows the 90-day period to be extended for an additional 90 days under certain circumstances. Id.

Reg. 2-5-101.

Reg. 2-5-214.

Reg. 2-5-401; Reg. 2-5-603; BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines (Dec. 2016).

Reg. 2-5-401; Reg. 2-5-217; Reg. 2-5-601; Reg. 2, Rule 5, Table 2-5-1.

Reg. 2-5-301; Reg. 2-5-205.

Reg. 2-5-302; Reg. 2-5-303.

Reg. 2-1-404.1.

Reg. 2-1-320.

Hanson Notice to Comply for Pier 94 operation (April 26, 2016).

Id.

See webpage capture of Hanson’s Application Status for Pier 94 facility from BAAQMD website taken April 28, 2020. The status for each application is available from https://www.baaqmd.gov/permits/public-notices/permit-applications-received.

Webpage capture of Hanson’s Application Status for Pier 92 facility from BAAQMD website taken April 28, 2020.

As of January 13, 2020, BAAQMD’s website noted that the application status for Hanson’s Pier 92 operations was “Evaluating Permit Application Completeness.” As of April 2, 2019, the status was “Incomplete for Data. As of April 28, 2019, the status had changed to “Complete – Application Under Evaluation.” Webpage captures of Hanson’s Application Status for Pier 92 facility from BAAQMD website taken January 13, April 2, and April 28, 2020.

Clinic email with BAAQMD re Hanson permit status (Feb. 15, 2019).

Reg. 2-1-408.1.

Webpage capture of Hanson’s Application Status for Pier 94 facility from BAAQMD website taken April 28, 2020.

Hanson letter to BAAQMD re permit (June 6, 2016); webpage captures of CEMEX’s facility from BAAQMD website taken April 28, 2020.

Notably, Air District permitting rules require a permit applicant like Hanson to provide sufficient information for the Air District to determine the emissions at issue. Reg. 2-1-402.1. Moreover, an applicant bears the burden of providing substantial credible evidence to the Air District to prove that it qualifies for an exemption from permitting requirements. Reg. 2-1-502.
Reg. 2-5-302; CEMEX - BAAQMD's Health Risk Screening Analysis for CEMEX, Interoffice Memorandum (Apr. 15, 2015).

CEMEX – BAAQMD’s Health Risk Screening Analysis, Interoffice Memorandum (Apr. 24, 2015).

Id.

CEMEX Notice of Violation (May 2, 2016).

The Air District website states that the application date is June 1, 2016. Webpage capture of CEMEX’s facility from BAAQMD website taken April 28, 2020. CEMEX’s letter to the District requesting the throughput increase for Source 14 (S-14), however, is dated May 9, 2016.

See webpage capture of CEMEX’s Application Status taken January 13, 2020.

CEMEX letter to BAAQMD requesting throughput increase for S-14 (May 9, 2016). The throughput sought there is 389,375 tons per year. CEMEX claimed that the moisture content of the sand delivered at Source 14 exceeded 5 percent and therefore was exempt from the rule requirements.

See webpage capture of CEMEX’s Application Status taken January 13, 2020: “Incomplete for Data.”

BAAQMD Inspection Report of CEMEX Facility at 2 (May 31, 2018). The Air District inspector noted in the report that CEMEX processed 323,193.24 tons per year at Source 14; but he incorrectly stated that CEMEX had proposed a new throughput of 551,250 tons per year, rather than 389,375, for Source14. Consistent with the District inspector’s report, CEMEX reported throughput at Source 14 to be 301,917.3 tons per year in its 2018 Data Update Forms report. CEMEX 2018 Update Forms at 6.


See webpage capture of CEMEX’s Application Status taken April 28, 2020: “Incomplete for Data.”

CEMEX Permit to Operate at 5. The current Permit to Operate for CEMEX sets a throughput of 60,000 tons per year of sand for S-14 and states that the limit is based on “cumulative increase” and a health risk screening analysis.

Reg. 2-5-401.

Reg. 2-1-432.

Id.; Reg. 2-1-408.1.

See webpage capture of Hanson’s Application Status for Pier 94 facility from BAAQMD website taken January 13, 2020.

Reg. 2-1-309.

BAAQMD Engineering Division CEMEX Permit Application Status.


Id.; CEMEX letter to BAAQMD requesting throughput increase for S-14 (May 9, 2016).

67 Clinic email with BAAQMD re Central Notice of Violation status (Feb. 6 and 8, 2019).

68 Central Notice of Violation/Notice to Comply (May 16, 2016).

69 BAAQMD email response to Clinic re Notice of Violation process (April 26, 2017).

70 BAAQMD Complaint filed against Central (May 29, 2019).

71 Settlement Agreement between BAAQMD and Central (August 20, 2019).

72 BAAQMD Engineering Evaluation for Central at 2.

73 Reg. 2-5-101.

74 See Reg. 2-1-408 (action on application); Reg. 2-1-432 (determination of complete application).

75 Reg. 2-1-309.

76 Reg. 2-5-216; Reg. 2-5-601.4.

77 Reg. 2-5-302; Reg. 2-5-303. BAAQMD has not explained why the engineer's original correct calculation in the Health Risk Screening Analysis for CEMEX's proposed 2014 expansion was ordered to be redone.

78 Reg. 2-1-425 (sources of toxic air contaminants); Reg. 2-1-420 (suspension); Reg. 2-1-422 (revocation).

79 Reg. 2-1-404.

80 Reg. 2-1-404.2.

81 Reg. 2-1-313.

82 *Id.*

83 Reg. 2-1-412.

84 Reg. 2-5-101 (purpose of District’s New Source Review of Toxic Air Contaminants).