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July 11, 2016

TO: Each Supervisor

FROM: Cynthia A. Harding, M.P.H.
Interim Director

A handwritten signature in blue ink that reads "Cynthia A. Harding".

SUBJECT: **UPDATE ON DPH OVERSIGHT OF COURT-ORDERED INTERIOR
CLEANING OF HOMES IN PORTER RANCH**

This is to provide your Board with an update on progress of the court-ordered interior cleaning of homes in Porter Ranch and efforts by the Department of Public Health (DPH) to oversee compliance with the cleaning standards. As many as 10,000 homes in the Porter Ranch community may ultimately require cleaning, and to date, Southern California Gas (SCG) has performed interior cleaning on approximately 1,500 homes covered by a Los Angeles Superior Court (Court) order. DPH inspectors have documented SCG's deficient performance in achieving the cleaning standards specified by the Court's order. Therefore, a number of homes may require re-cleaning. Changes in SCG's management and execution of the cleaning process are required to effect necessary improvements in performance before the cleaning is expanded to all remaining homes in the affected area.

Background

DPH has continued to address the consequences of the Aliso Canyon natural gas disaster on the community of Porter Ranch. From the onset of this incident in late October 2015, DPH has closely monitored environmental conditions to assess potential health risks and track symptoms experienced by members of the community. DPH also directed SCG to provide for the temporary relocation of residents experiencing symptoms related to the gas release.

Following the permanent sealing of the failed gas well on February 11, 2016, residents continued to experience symptoms upon returning to their homes, suggesting that contaminants related to the gas release may be present in the indoor environment. DPH developed an indoor environmental testing protocol to assess whether oil and gas field-related contaminants were present in indoor air or house dusts, and possibly contributing to the reported symptoms. The protocol was developed and implemented in close consultation with environmental health experts at the United States Environmental Protection Agency, the California Office of Environmental Health Hazard

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Assessment, California Air Resources Board, and the UCLA Fielding School of Public Health. The testing was completed in April 2016 and the findings suggested the presence of oil and gas field-related contaminants in house dusts within the Porter Ranch homes.

On May 13, 2016, DPH issued a directive to SCG, requiring comprehensive cleaning for all homes that meet any of the following criteria: (1) the home is located within the boundaries of the Porter Ranch Neighborhood Council; (2) residents of the home participated in the relocation program; or (3) homes located within a 5-mile radius of the SS-25 well and where residents have experienced symptoms. On May 20, 2016, the Court ruled that SCG must provide an interior cleaning of Porter Ranch homes of relocated residents before SCG could terminate those household's relocation benefits. These cleanings were to be in compliance with standards and specifications set by the DPH protocol.

SCG's Non-Compliance with Cleaning Mandate

On May 22, 2016, SCG began cleaning the interiors of homes in Porter Ranch for then-relocated residents. DPH immediately deployed inspectors to the field who observed that the cleaning underway was substantially non-compliant with the Court-mandated DPH protocol. As a result, DPH issued a Stop-Work Order to SCG and advised that any homes cleaned during the period of the Stop-Work Order would require re-cleaning. In view of the gross deficiencies noted by the oversight inspectors, DPH required SCG to prepare and submit a detailed work plan as a means to ensure compliance with the Court-ordered cleaning. On May 25, 2016, DPH received SCG's Interior Home Cleaning Work Plan (Work Plan), and subsequently directed SCG to resume cleaning.

Despite adoption of the Work Plan, DPH continued to observe non-compliance with the protocol. Further measures were then undertaken by DPH to improve compliance, including daily field briefings with SCG that were followed by written reports itemizing deficiencies and directing SCG to implement corrective actions. By June 9, 2016, a total of 18 days of cleaning had been performed by SCG and its contractors. DPH performed oversight inspections on nearly 20 percent of the homes reported cleaned, and found that more than half did not meet the requirements of the cleaning ordered by the Court.

DPH Oversight Methods and Findings

DPH oversight of cleanings consisted of three separate elements: field observations by trained environmental health staff, review of cleaning deficiencies reported by residents, and expert review of field practices. This approach has provided a broad, objective basis for assessing SCG's compliance with the Work Plan. Daily meetings were initiated by DPH to bring noted deficiencies to SCG's attention without delay, and follow-up written reports were issued to SCG, detailing the deficiencies and requiring corrective action. DPH oversight was designed to assess compliance and to improve the overall quality of the cleaning process.

The oversight activities conducted by DPH have produced findings in areas critical to the removal of contaminants in the home interior. Critical deficiencies have been observed in four areas: training and experience of cleaning contactors, air scrubber use, high efficiency particulate air (HEPA) vacuuming, and air duct cleaning. Overall, DPH has found non-compliance with the court-mandated cleaning protocol in 65% of the homes visited, of which 16% were found to have critical deficiencies. DPH's oversight methods and findings are further detailed in Attachment 1.

Conclusions and Next Steps

Overall, SCG and its contractors did not consistently or completely follow the step-wise cleaning process specified in its own Work Plan, which is based on the cleaning protocol established by DPH and required by the Court. Substandard performance by SCG persisted despite DPH requiring SCG to adopt a detailed Work Plan, and to participate in daily briefings to ensure the rapid communication of deficiencies and implementation of corrective actions at the earliest possible time. Perhaps most notable, residents reported a high level of satisfaction with SCG's cleaning efforts in homes in which DPH provided beginning-to-end oversight, but dissatisfaction was reported by residents regarding cleanings that occurred in the absence of DPH oversight.

On June 20, 2016, DPH directed SCG in writing to implement four corrective actions. These corrective actions are: (1) retain cleaning contractors with the requisite level of knowledge, training, and experience, and ensure sufficient and qualified supervision for the cleaning crews; (2) provide a written and signed verification for each home that cleaning has been completed in full compliance with all DPH directives and the court order; (3) maintain a third party quality assurance/quality control program, to include qualified personnel who have been trained in industrial hygiene and remediation in the residential setting; and (4) provide documentation demonstrating corrective actions that have been taken for any cleanings identified in a DPH briefing report as being non-compliant. DPH had previously raised these four corrective actions with SCG through numerous briefings and follow-up briefing reports, without satisfactory compliance.

DPH met with SCG on July 6, 2016, and will meet with SCG again on July 11, 2016 in a final attempt to secure agreement to implement the identified corrective actions. As a contingency, DPH is conferring with Counsel on informing the Court of SCG's non-compliance with prior court orders, and seeking further orders as necessary.

If you have any questions or need additional information, please let me know.

CAH:ab

Attachment

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors

**SCG's Performance of Court-Ordered Cleaning of Homes in Porter Ranch:
DPH Oversight Methods and Summary of Findings**

I. DPH Oversight Methods

The oversight of cleanings provided by DPH consists of three separate elements: field observations by trained environmental health staff, review of cleaning deficiencies reported by residents, and expert review of field practices. This approach provided a broad, objective basis for assessing SCG's compliance with the Work Plan. Daily meetings were initiated by DPH to bring noted deficiencies to SCG's attention without delay; and follow-up written reports were issued to SCG, detailing the deficiencies and requiring corrective action. DPH oversight was designed to assess compliance and to improve the overall quality of the cleaning process.

(1) Field observations by trained environmental health staff: On each of the 18 days of cleaning, DPH conducted inspections in a minimum of 10% of the homes being cleaned in order to assess compliance with the Work Plan. Of the 1,457 homes SCG reported to have cleaned since the adoption of the Work Plan, 242 (17%) received an oversight inspection by DPH.

(2) Review of cleaning deficiencies reported by residents: As of June 15, 2016 a total of 56 residents have reported cleaning deficiencies, each of which DPH has routinely referred to SCG for corrective action.

(3) Expert review of field practices: DPH has retained an additional expert who is a Certified Industrial Hygienist with experience in post-disaster home cleaning, remediation, and restoration. This expert is conducting in-depth job-site reviews to determine if the work of SCG contractors complies with standards of practice for the industry.

II. DPH Oversight Findings

The oversight methods outlined above have produced a catalogue of oversight findings. Critical deficiencies have been observed in four areas: training and experience of cleaning contractors, air scrubber use, high efficiency particulate air (HEPA) vacuuming, and air duct cleaning. These are areas critical to the removal of contaminants in the home interior. Other deficiencies have been observed as well. The DPH oversight findings are further detailed in the list below.

(1) Training and Experience of Cleaning Contractors: DPH has concluded that there was a lack of necessary experience and familiarity with industry standards of practice on the part of cleaning crews and on-site supervisors. DPH oversight teams intervened in the field as much as possible to correct deficiencies in real time. Members of the cleaning crews stated directly to homeowners and to DPH inspectors that they had never before participated in interior home cleaning. DPH requested SCG to remedy this issue of inadequate experience and onsite supervision, but has not received an adequate response.

(2) Air Scrubber Use: DPH has concluded that SCG and its contractors were unable to properly set up and operate air scrubbers, which are critical tools to achieve a minimum of one air exchange every 20 minutes, and to actively ventilate homes and capture dust during the cleanings. These repeated deficiencies negate the purpose and benefit of the air scrubbers. In addition, only one air scrubber machine was routinely being used in large homes (e.g. over 2,000 square feet), which is inadequate to achieve the necessary air exchange rate. Other deficiencies included poor maintenance of machines between jobs, resulting in the transfer of dust and debris from home-to-home throughout the day; failure to operate the machines at the appropriate start times and durations, resulting in inadequate removal of contaminants; and knowledge of how many doors and windows to keep closed or open during operation, resulting in inadequate air exchange.

(3) High Efficiency Particulate Air (HEPA) Vacuuming: DPH has concluded that cleaning crews did not HEPA vacuum accessible interior surfaces as required. This issue was brought to SCG's attention repeatedly through daily briefings, without resolution. These repeated deficiencies resulted in the inadequate removal of contaminants from homes. Cleaning crews did not use the appropriate hoses and fittings in order to effectively clean different types of interior surfaces. The Work Plan specifies that commercial-grade HEPA vacuums shall be used to clean interior home surfaces, including countertops, wood and tile floors, carpets, furniture, and walls. In numerous cases, cleaning crews did not bring the proper equipment and/or did not have knowledge of how to use the equipment properly. In addition, vacuum bags and filters were not consistently cleaned or changed as necessary between homes, resulting in the transfer of contaminants from home-to-home; crews did not HEPA vacuum in the correct sequence and locations compared with other components of the cleaning process such as wet-wiping, resulting in the liberation of dust and contaminants into the air and/or reappearance of contamination onto already-cleaned surfaces; crews skipped various surfaces in the homes, resulting in contaminants being left behind; and crews were not equipped with proper extensions to reach higher home surfaces, resulting in incomplete vacuuming.

(4) Air Duct Cleaning: DPH has concluded that the cleaning crews were not committed to the attention to detail or level of performance required to comply with the applicable standards related to the cleaning of air ducts. Deficiencies included not replacing all of the Heating, Ventilation, and Air-Conditioning (HVAC) air filters, resulting in persistence of contamination in home air conditioning systems; not placing polyethylene sheeting on horizontal surfaces below the air vents during cleaning, resulting in re-contamination of the home; and crews having a lack of experience to address the range of site-specific HVAC conditions in each home, resulting in inadequate cleaning of ducts. In order to identify factors contributing to the continuing substandard performance, the expert retained by the County has reviewed air duct cleaning practices employed by SCG's contractors, and interviewed cleaning crews and supervisors. Based on these reviews, it is clear that the cleaning crews did not devote sufficient time to complete the duct cleaning in compliance with the applicable standards.

(5) SCG Policy on Furniture Moving: DPH has concluded that furniture should be moved by SCG as needed, in order to provide access to all surfaces to be cleaned; however, DPH has learned that SCG did not move furniture when needed, especially to access areas where dust may have accumulated. DPH received numerous questions about this issue from residents, and learned that many residents were compelled to move their own furniture after being told that SCG would not do

so. Some residents experienced the onset of symptoms while making these preparations for cleaning. SCG responded by stating its policy not to allow cleaning crews to move any furniture or to move personal effects. DPH has determined that furniture must be moved as necessary to access areas of potential dust accumulation, and that residents should not be responsible for moving their own furniture. DPH has requested that SCG provide a remedy for this issue, in order to provide both optimal cleaning and protection of the health of the residents, but has not received an adequate response.

(6) Dry Cleaning of Drapery: DPH has concluded that, contrary to the approved Work Plan, SCG and its contractors advised many homeowners that there was no procedure for dry cleaning drapes. The Work Plan clearly states that residents may request their drapes be dry cleaned; however, residents did not receive instructions or responses to inquiries regarding dry cleaning reimbursement. SCG has not provided a mechanism for residents to complete this step of the cleaning as outlined in the Work Plan.

(7) Other Reoccurring Areas of Non-Compliance: Other observed and documented recurring deviations from the Work Plan included: (a) lack of an on-site Health & Safety Plan, leading to increased risk to cleaning crews and homeowners during cleaning; (b) workers not wearing shoe covers, leading to the tracking of dusts and debris from home-to-home; (c) lack of and improper installation of air filters, leading to inefficient air handling and recontamination of air ducts; (d) improper sequencing of cleaning activities, leading to inadequate removal of contaminants from the home; (e) re-use of polyethylene sheeting from house to house, leading to transfer of contaminants from home-to-home; and (f) lack of or incomplete wet-wiping of surfaces, allowing contaminants to be left behind.

III. Summary

Overall, DPH has found non-compliance with the court-mandated cleaning protocol in 65% of the homes visited, of which 16% were found to have critical deficiencies as referenced above.