OIG

Office of Inspector General

U.S. Department of State • Broadcasting Board of Governors

AUD-CGI-17-19 | Office of Audits | December 2016

Management Assistance Report: Evaluation of the Environmental Studies and Test Results for the Site of the New U.S. Embassy in Mexico City, Mexico

MANAGEMENT ASSISTANCE REPORT

Summary of Review

In 2011, the Bureau of Overseas Buildings Operations (OBO) negotiated a purchase agreement to initiate the acquisition for $120 million of 15.3 acres of land from the company Colgate-Palmolive to build a new embassy compound in Mexico City. This property was earlier used by Colgate-Palmolive to manufacture soap. In accordance with the purchase agreement, Colgate-Palmolive was required to present the property in ready-to-build condition. This required that all contaminants and environmental hazards that "may be present on the property in violation of all applicable environmental laws in Mexico shall either be removed and disposed of off-site, or shall be appropriately capped onsite…." The purchase was not to be completed until the Mexican Ministry of Environmental and Natural Resources (SEMARNAT) confirmed that Colgate-Palmolive fully implemented the approved Remediation Action Plan.

In March 2014, OBO contracted with Jacobs Engineering Group to monitor Colgate-Palmolive's progress on the demolition and environmental remediation and to re-confirm the ready-to-build condition of the site based on the submission of data from Colgate-Palmolive to SEMARNAT. Additionally, Jacobs Engineering Group provided OBO with weekly and monthly activity reports.

In October 2015, the Office of Inspector General (OIG) executed an agreement with the U.S. Army Corps of Engineers (USACE) to provide an independent assessment of the environmental studies and test results for the site of the new U.S. Embassy in Mexico City, Mexico.

In anticipation of the September 8, 2016, finalization of the projected property purchase, on July 14, 2016, OIG provided OBO with a discussion draft of the USACE report dated June 23, 2016. The report presented its assessment of the environmental remediation of the property based on information supplied by OBO for activities from January 2014 through March 2016.

On July 20, 2016, OIG met with OBO to discuss the draft report. At that time, OBO stated that the draft report did not take into account information that it had received from Colgate-Palmolive on June 23 and July 7, 2016—information that had not, as of the July 20 meeting, been provided to OIG. In particular, Colgate-Palmolive notified OBO on June 23, 2016 that the site met the purchase agreement's ready-to-build requirement. OIG agreed to have USACE update its report with the most current information available and asked OBO to provide all the available information. OIG, however, did not receive the additional information until August 1, 2016, when OBO provided to OIG 25 binders of information containing various reports. All but four of these 25 binders were in Spanish. Because OBO did not provide OIG with any additional translated documentation as OIG had requested, USACE's review was limited to the information in the four reports that were in English. Thereafter, USACE updated the report's conclusions and recommendations based on the new information. The results of USACE's updated assessment, dated September 29, 2016, are presented in their entirety in Appendix A.

In July 2016, SEMARNAT executed its final approval of the decontamination of the site, and SEMARNAT approved the decontamination efforts and the hazardous waste management completed by Colgate-Palmolive.

In August 2016, Jacobs Engineering Group completed its final review of the ready-to-build documents provided by Colgate-Palmolive and SEMARNAT's July 2016 approval of Colgate-Palmolive's remediation plan. Jacobs Engineer Group agreed with SEMARNAT's conclusions.[1] OBO completed the purchase of the property on September 8, 2016.

According to the purchase agreement, Colgate-Palmolive indemnifies and holds the Department of State harmless for all environmental liabilities caused by Colgate-Palmolive's remediation or use of property prior to settlement date and arising within the applicable statute of limitations under Mexican law. OBO stated that the statute of limitations was five years or longer if Colgate-Palmolive had knowledge of the environmental liability or was negligent in the cleanup of the site.

OIG issued this Management Assistance Report to ensure that the findings of USACE were carefully considered and offered OBO an opportunity to address the report's findings, conclusions, and recommendations. OIG adopts USACE's recommendations (1) to consider taking soil samples during the construction of the new embassy compound to confirm the conditions within the site plan and that the soil samples can be applied to provide results that target areas where contamination is suspected or encountered during the excavation and/or grading work and (2) to review existing local ground penetrating radar data and/or generate new geophysical data across the site to determine whether remaining subsurface structures are present and evaluate whether additional soil sampling and/or analyses during construction of the embassy compound are needed to determine whether the site conditions are acceptable for future use of the property. According to USACE, these additional steps should be taken to mitigate environmental risks and confirm that site conditions are safe for occupancy by U.S. Government personnel.

OBO responded on November 10, 2016 to the recommendations set forth by the USACE. Although these comments are reprinted in their entirety as Appendix B, OIG addresses certain specific points below.

As to Recommendation 1, OBO "is confident that all known and identifiable sources of contamination were removed," and it "does not believe that additional soil sampling is necessary." As to Recommendation 2, "OBO does not agree with the recommendation to review . . . GPR data further and has determined that additional soil sampling would be unnecessary" and is "confident that subsurface structures have been removed." In rejecting

[1] Throughout the remediation process, Jacobs Engineering Group voiced concern to OIG regarding Colgate-Palmolive's lack of transparency and identified several specific instances. However, Jacobs Engineer Group stated that these concerns were resolved during its final ready-to-build review.

both recommendations, OBO relies on SEMARNAT's assessment, Jacobs Engineering Group's report, and the fact that the Department's Office of Safety, Health, and Environmental Management "considers this a low-risk site." OBO also refers to the indemnification provision in the purchase agreement.

It is OIG's position that the recommendations offered in the USACE report, which took into account SEMARNAT's assessment as well as Jacobs Engineering Group's report and other materials have merit and warrant additional consideration. The USACE report provides detailed analysis as to why additional sampling and review of data would be prudent. Moreover, although OIG expresses no opinion on the applicability or operation of the indemnification provision, which states that it is subject to Mexican statute of limitations, OIG believes it is also prudent to minimize the need to raise an indemnification claim, whether through litigation or otherwise, in the first place.

Separately, OBO's response states that it provided OIG with documents in a timely manner. OIG's summary report does not characterize OBO's provision of documents but simply notes that OIG received a large volume of untranslated materials—25 binders—in August 2016, after USACE had prepared an initial report and less than five weeks before the date that OBO closed on the property. As a result, USACE could not complete its report before the September 8 closing. And although OBO explains that Jacobs Engineering Group had a bilingual consultant to review the Spanish-language materials, OIG specifically requested translated documents to facilitate a timely review of the newly produced documents. OBO did not provide translations, despite the fact that it agreed to do so, which, as noted above, hampered OIG's ability to review the complete set of materials before OBO closed on the property.

In the end, precisely because of the importance of this compound and the resources that have already been expended, the Department should comply with the recommendations set forth in the USACE report.

APPENDIX A: U.S. ARMY CORPS OF ENGINEERS ENVIRONMENTAL DOCUMENTATION REVIEW

UNITED STATES DEPARTMENT OF STATE – OFFICE OF INSPECTOR GENERAL

Environmental Documentation Review

For C-P Legaria Plant, Mexico City, Mexico

US Army Corps of Engineers – Environmental & Munitions Center of Expertise

9/29/2016

EXECUTIVE SUMMARY

A memorandum of agreement (MOA) was established between Department of State (DOS) Office of Inspector General (OIG) and US Army Corps of Engineers (USACE) on October 28, 2015 for the USACE Huntsville Directorate of Environmental and Munitions Center of Expertise (EMCX) to perform an environmental review of property assessment and remediation documentation covering a 15.3 acre parcel located in Mexico City, Mexico. DOS future use of this property includes most of the area dedicated for construction of the new US embassy building and its adjoining courtyards; and the remaining areas for potential resale for future residential or commercial use. DOS signed a purchase agreement / contract with Colgate-Palmolive (C-P) to initiate the property purchase in February 2011.

Pursuant to the property transfer, C-P initiated an environmental site assessment process to identify areas or conditions that may have resulted in an adverse impact to the environment. Areas of concern (AOCs) that were identified then underwent remedial actions according to Mexican environmental regulatory authorities (SEMARNAT and PROFEPA) regulations, policy and guidance. Other production areas underwent routine decommissioning, dismantling, demolition, and decontamination activities.

The original submission of environmental documents for EMCX review was incomplete and focused on the early Phase I and II site assessments (2011-2014), with very limited information on current remediation activities or progress. Feedback on these deficiencies, resulted in a second submission of the monitoring reports generated by DOS Overseas Building Operations (DOS-OBO) oversight contractor covering the fieldwork performed from May 2014 to Feb 2016. Based only on the information provided in the original and supplemental submissions, the EMCX generated a draft Environmental Documentation Review for DOS-OIG. Due to the outstanding issues raised in this draft review, another submission of critical documents was received, including the 2012 Remedial Action Plan (RAP), 2015 RAP Modification, 2015 Geophysical Exploration Report, 2016 Environmental Site Remediation Conclusion Report, and the 2016 Certificate of Decontamination from the Mexican Ministry of the Environment and Natural Resources. This third submission of documents provided adequate detail to complete the environmental documentation review, and was the basis for a substantial revision of this Environmental Documentation Review Report.

As previously noted, C-P recently provided DOS-OBO the critical additional documentation on June 23 and July 7, 2016 to confirm the completion of the remediation work performed. This documentation was forwarded to DOS-OIG for inclusion in the third submission in order to complete the review task by the USACE EMCX.

Based on the EMCX evaluation of the recent C-P documents submitted and specifically the Certificate of Decontamination presented in DGGIMAR 710/006303, approving all contaminated areas identified within the main plant parcel, including Areas 1, 4, 5, 6 and 7 have achieved cleanup goals for residential use according to the Mexican Ministry of the Environment and Natural Resources.

The external parking lot parcel, which includes contaminated areas 2 and 3 have achieved cleanup standards supporting a commercial / industrial use only. Final SEMARNAT documentation (DGGIMAR 710/006303) states the (regulatory) Resolution will be invalidated if a different land use is destined for this area (i.e., residential). Properties surrounding the external parking lot parcel include residential

properties to the north and west; a school to the east and to the south is the remediated former Colgate Main Plant parcel (residential use). Due to the future land use restrictions on this external parking lot parcel being commercial / industrial only, may impact DOS future plans for this area.

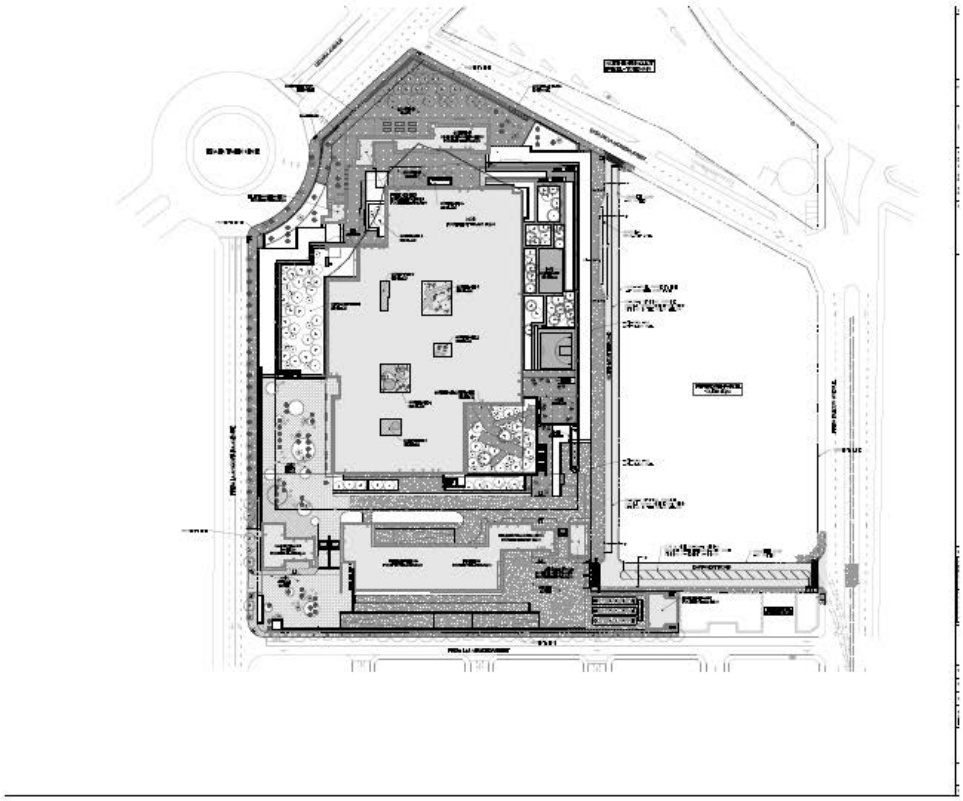


Figure 1 – Site Plan for New Embassy in Mexico City, Mexico

INTRODUCTION / PURPOSE

Working on behalf of the DOS-OIG (Department of State-Office of Inspector General), the USACE Huntsville EMCX (US Army Corps of Engineers Huntsville Directorate of Environmental and Munitions Center of Expertise) has performed an environmental assessment for the prospective site of the new US Embassy – Mexico City, Mexico. The site is a 15.3-acre property parcel within the Nuevo Polanco neighborhood, approximately 3 miles west of the current US embassy. The property is owned by Colgate-Palmolive (C-P) and is the location of the former 'Legaria Plant' a soap production plant.

As defined in the MOA between the DOS-OIG and USACE (10/28/2015), tasks include an assessment of the site's data and environmental condition, remediation performed to identify critical issues, data gaps or if concerns remain, and offer recommendations to DOS-OBO (Department of State, Overseas Building Operations) for DOS-OBO future development of the property. Several documents were submitted by C-P to DOS-OBO. These documents were later submitted to the USACE EMCX (via OIG) and reviewed, including

- February 2011 real estate contract documents,
- Workplans for environmental investigations, remediation and environmental reports primarily covering the early phases of remediation work,
- Analytical data reports from samples taken from Feb-May 2014,
- Mexican Government published standards for environmental remediation work, Project correspondence between Colgate-Palmolive (C-P) to/from associated Mexican regulatory authorities (i.e., SEMARNAT, PROFEPA, SEDEMA).
- DOS-OBO's oversight contractor (Jacobs) submission of daily/weekly/monthly reports covering May 2014 to February 2016 and letter reports in English which translate and condense C-P's Corrective Action Plan and Soil Remediation Plans submitted in the Spanish language.
- DOS-OIG provided the EMCX with critical documents in August 2016, including the Environmental Site Remedial Action Plan (RAP) (2012), RAP Modification (2015), Environmental Site Remediation Conclusion Report (2016), (Jacobs) Geophysical Exploration Report (2015), and (SEMARNAT) Resolution of the Remediation Proposal at the two adjacent plots owned by the Inmobiliaria Colpal (Colgate-Palmolive), DGGIMAR 710/006303 (July 5, 2016).

Source Information Limitations: Documentation submitted from C-P was initially very limited. However, recent (August 2016) submissions to the EMCX have provided the necessary paperwork to fully document the remediation work performed.

Confirmation soil sample data was recently submitted to DOS-OBO from C-P within the July 7, 2016 Delivery of Environmental Remediation information. Other key documents covering the Ground Penetrating Radar anomaly excavations and backfill soil quality and backfill compaction results was received within the June 23, 2016 Delivery of technical documentation.

According to DOS-OBO personnel at the July 20, 2016 meeting, DOS-OBO chose not to perform any independent measurements of the contamination onsite. Therefore, no split soil samples or independent screening of samples in the field with PID (photo-ionization detector) meter were available to confirm the Site conditions.

GENERAL C-P SITE BACKGROUND

C-P purchased the main property (12.7 acres) in 1941, constructing a soap production facility that operated from 1949-1960 as the Legaria Plant producing soap bars, powders and detergents. In 1960 C-P expanded the main plant facility and production capacity. In 1974 C-P purchased the northern property parcel (2.6 acres) from an asphalt batch plant that had been in business for ~25 years. By 1977, C-P had removed the asphalt operations equipment and renovated the area for an employee parking lot and Hazardous Waste storage area. C-P maintained operations at the Legaria plant until May 2013, with continued upgrades to production facility, processes, and operational procedures during its time of operation.

In February 2011, DOS-OBO and C-P entered into a "Promissory Purchase Agreement" and "Option Contract for the Purchase of Real Estate". Within these documents, environmental obligations are covered under Conditions, paragraph 9.b.ii, under a broader requirement for "**Ready to Build**" status of the property by the Settlement Date and prior to delivery of the property. According to the Promissory Purchase Agreement included within the February 23, 2011 Option Contract for the Purchase of Real Estate (sections 9.b.i – iv), the term "Ready to build" means that:

> *"All contaminants and environmental hazards which may be present on the property in violation of applicable environmental laws in Mexico shall either be removed and disposed of offsite, or shall be appropriately capped onsite, in compliance with such applicable environmental laws, as set forth in the remediation plan filed with and approved by the Mexican Ministry of the Environment and Natural Resource (SEMARNAT), or any successor agency, in connection with the transactions contemplated by this purchase contract, including any additional remediation plans required to be filed with and approved by SEMARNAT as a result of any additional contaminants or environmental hazards discovered by the Seller or any changes in applicable Mexican environmental laws subsequent to the date hereof, but prior to settlement, as applicable."*

Applicable Environmental Regulations: The Mexican Environmental regulations were established between 2000 to present for most contaminants encountered at the Legaria Plant. In general, the regulations are similar to the USEPA, and will rely on US standards; while other aspects are less stringent. All SEMARNAT Authorizations apply USEPA standard methods to analyze samples.

- Contamination from Petroleum, Oils, and Lubricants (POL) are evaluated by standards established for TPH (Total Petroleum Hydrocarbons), PAH (Polycyclic Aromatic Hydrocarbons), and BTEX (Benzene, Toluene, Ethylbenzene and Xylene) compounds initially in 2003 in NOM-138-SEMARNAT/SS-2003, and NOM-138-SEMARNAT/SSA1-2012.
- Heavy metals contaminants apply standards from NOM-147-SEMARNAT/SSA-1-2004.
- PCB contamination is governed by standards from 2001 in NOM-133-SEMARNAT-2000.
- Chlorinated organic solvents are not regulated by any published Mexican Environmental Standards. SEMARNAT established criteria for these compounds within the Official Authorization correspondence, from proxy standards adopted from Texas Risk Reduction Program (TRRP) Tier 1 for industrial / residential soil standards for TCE and PCE monitoring.

C-P SITE ENVIRONMENTAL RECORDS REVIEW

In 2001, C-P contracted with URS-Dames & Moore to perform a historical records review and site visit to evaluate production activities at the C-P Legaria Plant to identify areas or conditions that may cause adverse impacts to the environment. Findings were presented in a Phase I Environmental Site Assessment (ESA) Report, including site layout for buildings, process areas and other features (figures 2a, 2b and 2c). Results of the Phase I ESA report identified several areas with potential environmental impacts and liabilities, including numerous aging Underground Storage Tanks (USTs) used for storing alcohol, toluene, gasoline, diesel, mineral oil; Above-ground Storage Tanks (ASTs) storing sulfuric acid, sulfonic acid, greases, oils, glycerin, mineral oil, alcohols; dilapidated sumps and secondary containments; deteriorating wastewater discharge / drainage systems, and poor environmental management practices in production areas such as the sulfonation plant, kettle buildings, detergent drying towers and soap processing areas.

In March 2011, C-P contracted with ERM to perform another Phase I ESA Report. This 2011 Phase I ESA summarized the Legaria Plant's industrial processes and identified similar sources of contamination as the 2001 Phase I ESA. It should be noted that the 2011 Phase I ESA report indicates that all USTS have been removed or closed at the site, and supplements the information presented in the 2001 ESA.

Based upon entering into an Option Contract for the Purchase of Real Estate with C-P in February 2011, DOS-OBO contracted an independent review and preparation of a Phase I ESA of the Colgate Site with Schnabel Engineering, LLC. Similar findings were included in this report to the C-P contracted reports.

Records Review Highlights: Main sources of contamination noted in the Phase I ESA documents relate to poor housekeeping during production operations, and the lack of past operational records, limited historic site plans or knowledge of layout of equipment from older processes. Retired production lines, tanks, sumps, cisterns that were encountered during demolition activities were removed in order to achieve 'Ready to build' status.

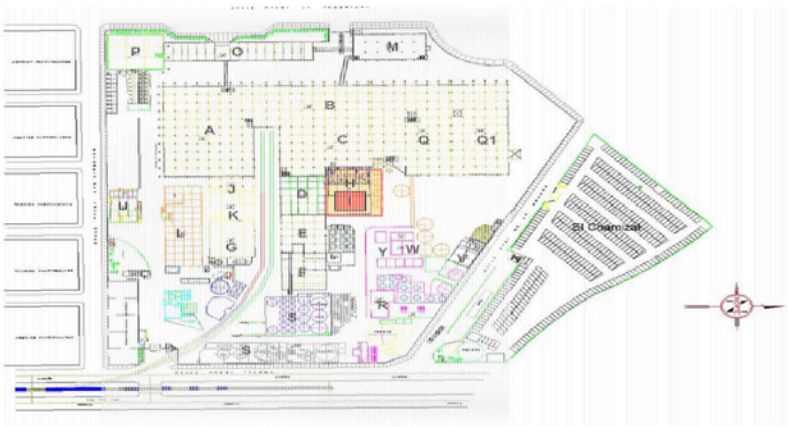
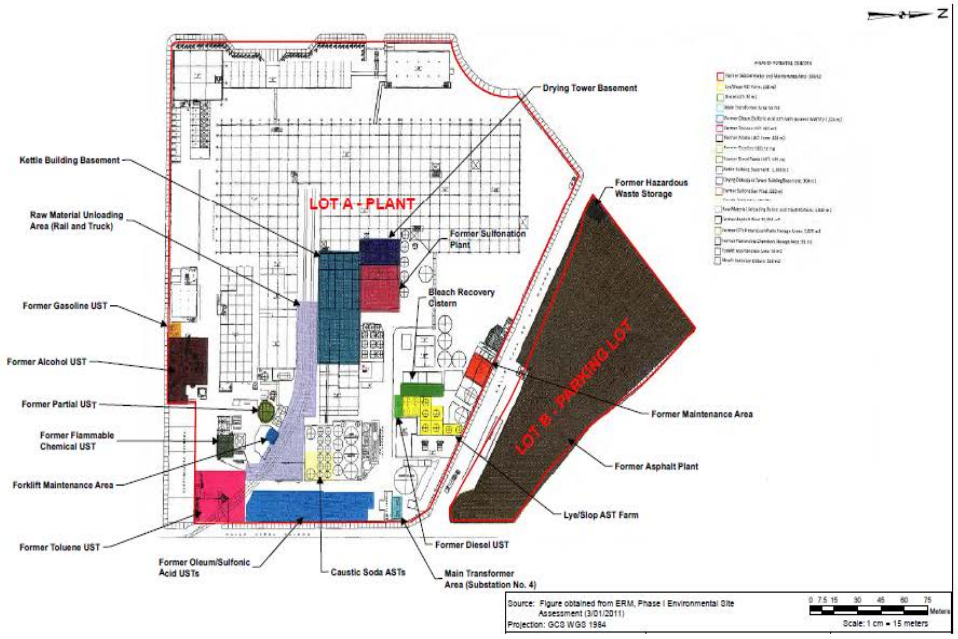
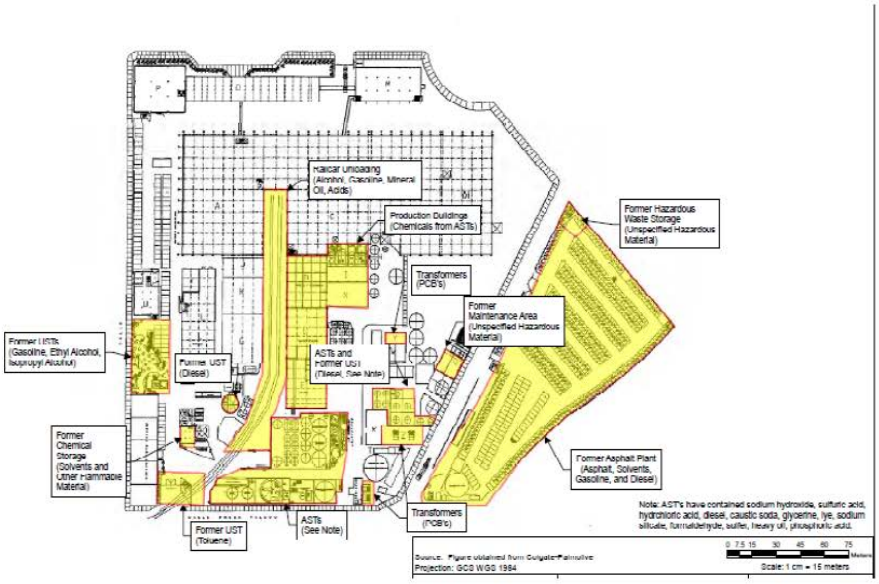


Figure 2a – C-P (Legaria Plant) Buildings Layout





Figures 2b and 2c – C-P Legaria Plant Process Areas and C-P Site Features / Potential AOCs

C-P SITE ENVIRONMENTAL INVESTIGATIONS

C-P continued contracting with ERM to perform follow-on investigations and evaluate the environmental condition at some of the areas identified during the Phase I ESA. ERM work also included the development of support documents, i.e., Sampling Program dated March 2011 to outline the procedures employed for the focused soil sampling and analyses.

Phase II ESA (2011)

ERM performed a Phase II Environmental Site Assessment in May 2011. The preliminary site-wide Phase II investigation acquired a total of 164 soil samples from 59 soil boring locations (figure 3). Results of the 2011 Phase II ESA showed a number of samples with exceedances of standards (figure 5). Based on these results, C-P identified two (2) areas as Areas of Concern (AOCs) including the former Diesel UST (Area Y) and the Parking Lot area in the northern parcel (Chamizal). Other areas were noted as well below regulatory requirements for commercial / industrial standards. Of these two AOCs identified, soil analytical results from the former diesel UST area showed that contamination from medium and heavy fractions of total petroleum hydrocarbons (TPH) were above the Mexican Official Standard for commercial / industrial use. In the parking lot area, the medium and heavy fraction petroleum hydrocarbons were observed above the Mexican standards in a few samples, and vanadium (metal) exceeded the Mexican Official Standard for commercial use at another location.

In May 2012 C-P submitted a Remediation Proposal for Contaminated Soil with Hydrocarbons Heavy and Medium Fractions and Vanadium to SEMARNAT for approval to cover the remediation necessary at Area Y (former diesel UST) and north parcel's parking lot (Chamizal). SEMARNAT approved the remediation proposal in its Authorization No. DGGIMAR.710/008284 dated Nov 16, 2012. This Authorization established procedures for the remediation work in these AOCs and applied industrial standards for data interpretation of site closure. In this correspondence however, SEMARNAT incorporated a caveat for additional investigation work to be performed, including supplementary samples from areas adjacent to inaccessible areas under buildings, sewers, tanks and production areas.

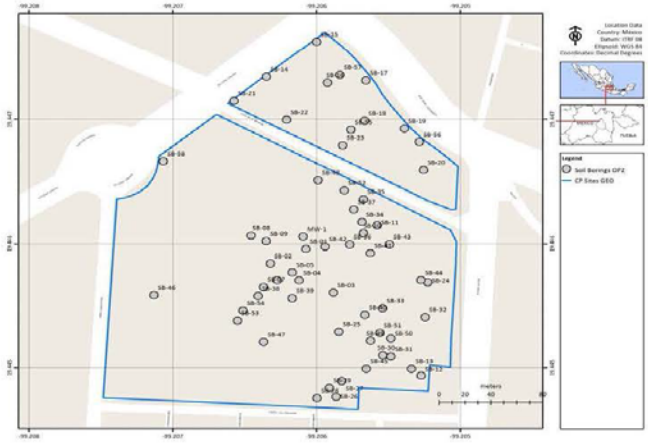


Figure 3 - 2011 Phase II ESA Soil Boring Location

Complementary Phase II ESA (2014)

C-P / ERM conducted a Complementary Phase II in June 2014. Figure 4 shows soil boring locations for this Complementary Characterization, which increased soil sampling coverage applied at each building to a minimum of one soil boring sampled at two depths. Based on this additional investigation work, sample results exceeding industrial based criteria were observed at two more areas (figure 5). C-P identified them as AOCs, where remediation was necessary. Area S (sulfonation tank farm) is where sample results showed the (medium and heavy fractions) TPH and VOC contamination (PCE) was above the Mexican industrial standards applied initially, as well as the residential standards eventually applied to this area. Other areas of contamination were located in the basement of Buildings I and C, which showed VOC contamination (TCE and PCE), and buildings Q and W where sample results showed the (medium and heavy fractions) TPH and the (light fraction) of TPH were above residential criteria, respectively.

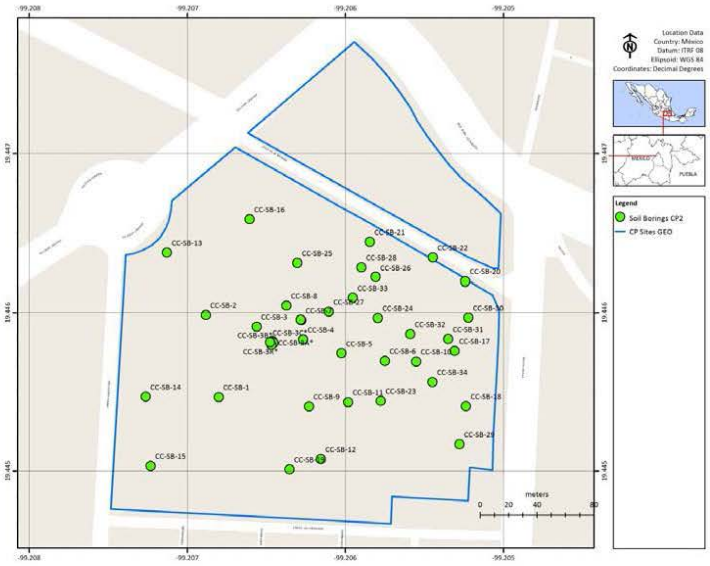


Figure 4 - 2014 Phase II ESA Soil Boring Locations

C-P also submitted several analytical data reports prepared by Intertek Laboratory to DOS-OBO for a portion of samples taken under this Complementary Phase II effort. Review of these analytical data packages shows that EPA methods were followed and that the data generated was of generally acceptable quality. No batch Quality Control information was provided in the data packages, in order to evaluate compliance with EPA method requirements (e.g., method blanks, and control samples) or criteria.

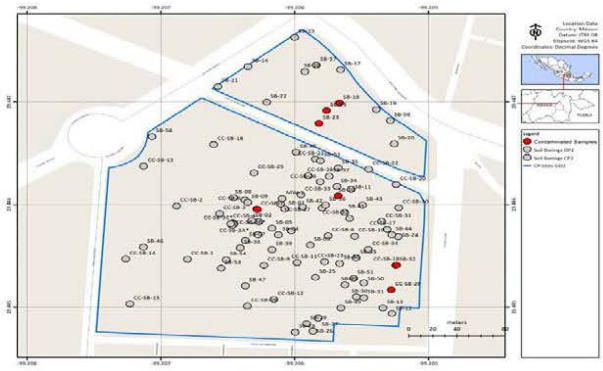


Figure 5 – Combined 2011 and 2014 Phase II ESA Soil Boring Locations (exceedances noted in red)

Investigation Limitations / Concerns: The vertical and horizontal extent of contamination at some of these AOCs was NOT fully delineated prior to initiating removal actions. While this approach appears to progress more quickly, it is subject to greater unknowns, especially when 'chasing contamination' with a backhoe, with limited understanding when contamination stops. This uncertainty resulted in C-P/ERM extending the remediation timeframe for the property on several occasions.

Overall site-wide soil sample density observed in figure 5 from the Phase II ESA work efforts provides at least one soil boring from each building footprint or process area. Additional sampling was performed to delineate the nature and extent of contamination identified in the Phase II results. However, other areas had fewer samples to no sampling performed (majority of USTs, sumps, process lines, electrical transformer substations, etc.).

Normally samples acquired during this phase of investigations are focused to a worst-case, or most highly contaminated locations. This was not always the case here. For example, due to the uncertainty in underground structures presence and potential danger from energized lines, samples taken for PCB analysis were taken no closer than 3 meters from the source area being assessed. This ~9 foot safety buffer may have (inadvertently) restricted the ability to obtain a representative sample for the area potentially impacted by PCBs, resulting in no contamination being present in the samples, or may underestimate the contamination that is present.

A late change in cleanup criteria from an industrial exposure scenario to a residential scenario for the main plant parcel, led to a decrease in the chemical concentrations allowed to remain onsite for many chemical compounds or chemical parameters. This mandated a re-interpretation of ESA data to ensure remediation was planned and performed at all locations that exceeded the residential criteria. This reassessment work was documented in the RAP Modification (2015).

C-P SITE AOCs ENVIRONMENTAL REMEDIATION

C-P/ERM conducted Decommissioning, Dismantling, Demolition and Decontamination activities across the Legaria Plant facility in order to attain "Ready to Build" status and ultimately transfer the property to DOS-OBO. Environmental remediation procedures to attain resolution from the Mexican Ministry of the Environment and Natural Resources (SEMARNAT) were integrated into this demolition work at each AOC and were detailed in the Environmental Site Remedial Action Plan (RAP) (2012) and RAP Modification (2015). Reassessment of the investigation results was also done within the RAP Modification (2015) to adopt residential cleanup standards, and manage contaminated media as specified in the applicable SEMARNAT Authorizations. Of the three known SEMARNAT Authorizations applicable to the Legaria Plant, only two Authorizations have been submitted to the EMCX for review. The most recent Authorization No. DGGIMAR.710/001467 dated February 19, 2015 has not been provided to the EMCX covering remediation work at buildings Q and W, as well as the change from industrial to residential criteria.

DOS-OBO also gathered progress information from Jacobs, their oversight contractor at the Legaria Plant. Beginning on May 12, 2014, Jacobs's personnel were onsite approximately twice a week to monitor the site demolition and soil remediation activities. Jacobs prepared daily, weekly and monthly reports to summarize activities conducted, highlight communications with C-P/ERM, and address any outstanding issues.

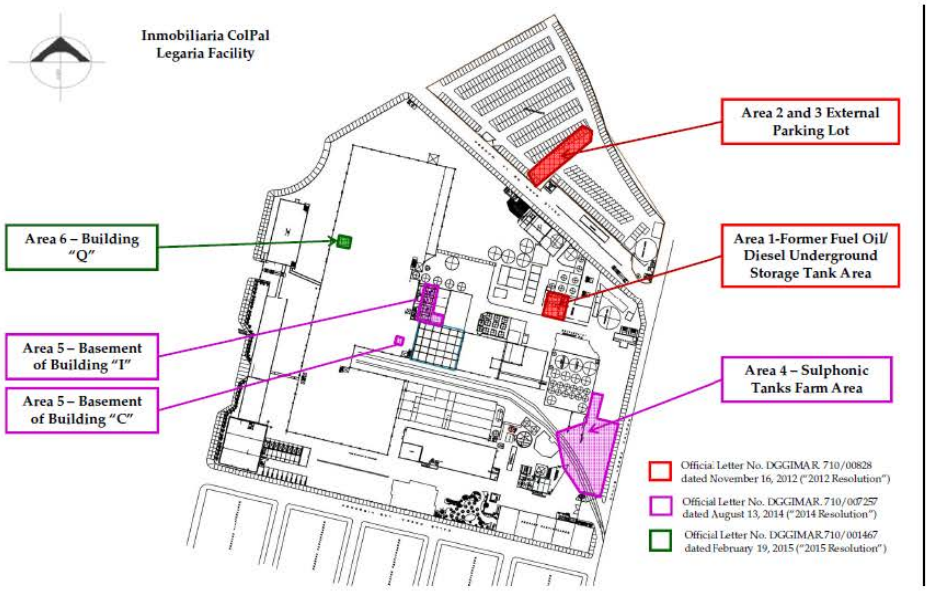


Figure 6 – C-P Legaria Plant Site with Remediated Areas in April 2015

SEMARNAT Authorization No. DGGIMAR.710/008284 dated Nov 16, 2012, covers remediation efforts at Areas 1 (former diesel UST) in the main plant area, and Areas 2 and 3 (external parking lot) in northern parcel area.

Former Diesel UST (Area Y / Area 1)

Contamination at Area 1 was identified during the 2011 Phase II ESA, and based on SEMARNAT approval of the proposed remediation, C-P initiated demolition and remediation activities in this area. Excavation and removal of contaminated soil was conducted at the former diesel UST area from February 26, 2014 to April 11, 2014. Deepest excavation depth from the former UST was 5.7 meters (18.7 feet), over an excavated area of 183 m^2. The volume of contaminated soil excavated from Area 1 was 573 m^3. Final Confirmatory Soil Sampling of the area was conducted in the presence of PROFEPA officials on October 30, 2014. Analytical results from the four wall, one floor and one duplicate samples confirmed sufficient excavation was complete to an industrial criteria for site closure. Later Resolution No DGGIMAR.710/000512 dated January 27, 2016 changed the comparison criteria for the main plant parcel, including Area 1 from commercial/industrial land use to residential. Results from the October 30, 2014 final confirmatory soil samples also met residential criteria.

External Parking Lot in Northern Property Parcel (Chamizal / Areas 2 and 3)

Contamination at Areas 2 and 3 were identified during the 2011 Phase II ESA, and upon SEMARNAT approval of the proposed remediation, C-P initiated demolition and remediation activities. Excavation and removal of contaminated soil was conducted at the parking lot area located within the northern parcel from November 25, 2013 to January 10, 2014. Deepest excavation depth for the contaminated soils was 4.6 meters (15 feet) in Area 2 and 3.2 meters (10.5 feet) in Area 3, over a combined excavated area of 611 m^2. The volume of contaminated soil excavated from Areas 2 and 3 was 1,434 m^3. Final Confirmatory Soil Sampling of the area was conducted in the presence of PROFEPA officials on December 9, 2013. Analytical results of the confirmation samples showed sufficient excavation of both the northern and southern trenches was completed in accordance with the industrial criteria for site closure. However, according to the DGGIMAR.710/006303, dated July 5, 2016 any change from commercial/industrial use of these soils will invalidate the resolution granted by SEMARNAT for Areas 2 and 3.

SEMARNAT Authorization No. DGGIMAR.710/007257 dated August 13, 2014 covers remediation of Area 4 (sulfonic acid tanks farm area) and Area 5 (buildings I and C).

Sulfonic Tanks Farm Area (Area S / Area 4)

Contamination at Area 4 was identified during the 2014 Complementary Phase II ESA, and based on SEMARNAT approval of the proposed remediation, C-P began demolition and remediation on August 20, 2014. Remediation was ongoing at Area 4 when C-P proposed the change for the main plant parcel, including Area 4, from a commercial/industrial land use to residential within the RAP Modification (2015). Additional correspondence from C-P to SEMARNAT, dated May 8, 2015 documented the increased volumes of contaminated soils at Area 4. Remediation work was completed on November 24, 2015. Deepest excavation depth at Area 4 was 35 meters (114.8 feet), over an excavated area of 2,704 m^2. The volume of contaminated soil excavated from Area 4 was 20,337 m^3. Final Confirmatory Soil Sampling was conducted in the presence of PROFEPA officials on three separate occasions, including

October 30, 2014, February 5, 2015, and November 24, 2015 before all soil results met the residential use criteria.

Noteworthy issues from the Area 4 excavation include the presence and removal of two (2) USTs that had been left in place. Text notes the prior closure-in-place of these tanks, with the removal of tank contents for proper disposal. But the piping connected to these tanks was full of fuel; and contamination in the area was suspected as originating from this piping as it degraded. Excavation continued in Area 4 when an open-ended "municipal sewer" was encountered and removed. Excavation continued deeper and contamination above residential criteria was still present at depths >20 meters. Confirmation sampling performed in October 2014 and February 2015 showed contamination remained above residential criteria and further remediation was necessary. Permit delays slowed remediation progress, but in May 2015 it was decided to temporarily backfill Area 4 and return to investigating the extent of contamination (via drill rig) prior to performing any additional removal work. Delineation activities began on June 8, 2015 and were completed in July 2015. Also in June 2015, excavation work to construct an access ramp for the area just west of Area 4 was underway, when a water cistern, located next to Area 4, was encountered which required removal. Soon afterward four (4) underground rooms for pumping calcium sulphate were also found next to Area 4. In August 2015 C-P contractors began preparation for re-excavation of Area 4 based on the extent of contamination delineated. Excavation continued and at about a depth of 18 meters, encountered and removed another UST. From the Legaria Plant site layout, this UST were confirmed as storing toluene. Foundations of the tank were removed in September 2015. Excavation continued deeper through October and concluded on November 24, 2015 with a final depth of 35 meters (~115 feet) as shown in Figure 7. PROFEPA witnessed the taking of an additional 15 confirmation samples on November 24, 2015, which confirmed that residential criteria was met. Final backfill operations were conducted from December 2015 to March 2016.

Figure 7 – Extent of Area 4 excavations (blue outline-preliminary; red outline – final)

Basement of Building I (Area 5)

The contamination at Area 5 - building I was identified during the 2014 Complementary Phase II ESA, and based on SEMARNAT approval of the proposed remediation, C-P was able to conduct demolition and remediation activities in this area. Excavation and removal of contaminated soil was conducted at building I between May 26, 2014 and October 24, 2014. Deepest excavation depth for the building I contamination was 3 meters (9.8 feet), over an excavated area of 392 m^2. The volume of contaminated soil excavated from Area 5 for building I was 910 m^3. Final Confirmatory Soil Sampling at Area 5 building I was performed in the presence of PROFEPA officials on October 30, 2014 with eleven soil samples. Results from this sampling showed building I excavation was complete and results met the industrial criteria for site closure. Later Resolution No DGGIMAR.710/000512 dated January 27, 2016 changed the comparison criteria for the main plant parcel, including Area 5 from commercial/industrial land use to residential. Results from the October 30, 2014 final confirmatory soil samples also met residential criteria.

Building C (Area 5)

The contamination at Area 5 - building C was identified during the 2014 Complementary Phase II ESA, and based on SEMARNAT approval of the proposed remediation, C-P was able to conduct demolition and remediation activities in this area. Excavation work at the building C portion of Area 5 was performed from October 28, 2014 to November 20, 2014. Final Confirmatory Soil Sampling at Area 5 building C was initially conducted on October 30, 2014 with six samples (4 walls, 1 floor, and 1 duplicate). Results from this sampling showed PCE contamination remained above residential criteria at one sample location (MFC-A5-6), so additional excavation of contaminated soil at building C was conducted. Deepest extent of excavation for the building C contamination was 2 meters (6.6 feet), over an excavated area of 51 m^2. The volume of contaminated soil excavated from Area 5 for building C was 102 m^3. Another Final Confirmatory Soil Sampling was conducted on February 5, 2015, with analytical results showing sufficient re-excavation was done, and all data met the residential criteria for site closure.

SEMARNAT Authorization No. DGGIMAR.710/001467 dated February 19, 2015 for Area 6 (building Q) and Area 7 (building W).

Building Q (Area 6)

Contamination at Area 6 was identified during the 2014 Complementary Phase II ESA, and based on SEMARNAT approval of the proposed remediation, C-P performed demolition and remediation activities from October 28, 2014 to November 20, 2014, and from January 29, 2016 to April 26, 2016. Deepest excavation depth for Area 6 contamination was 8.7 meters (28.5 feet), over an excavated area of 2,704 m^2. The volume of contaminated soil excavated from Area 6 was 7,803 m^3. Final Confirmatory Soil Sampling was conducted in the presence of PROFEPA officials on four separate occasions, including February 5, 2015, March 1, 2016, March 17, 2016 and April 28, 2016 before all soil sample results met the residential use criteria.

Building W (Area 7)

Contamination at Area 7 was identified during the 2014 Complementary Phase II ESA, and based on SEMARNAT approval of the proposed remediation, C-P performed demolition and remediation activities from January 29, 2016 to February 12, 2016. The deepest excavation depth for Area 7 contamination was 2.25 meters (7.4 feet), over an excavated area of 44 m^2. The volume of contaminated soil excavated from Area 7 was 68 m^3. The Final Confirmatory Soil Sampling was conducted on March 1, 2016, with analytical results showing sufficient excavation was done, and all data met the residential criteria for site closure.

Remediation Limitations / Concern:

- The extent of soil contamination that required excavation varied widely across the remediation areas at the C-P Site. Some area excavations were completed to relatively minor depths (<10 feet), including Area 5 – buildings C and I, and Area 7. More extensive excavations were needed for other areas (<30 feet), including Areas 1, 2/3, and 6. Area 4 however showed significant contamination migration to a depth of 35 meters (115 feet). Factors that may have caused this enhanced migration at Area 4 correlate to the practice of leaving old production equipment, storage tanks and distribution lines (including their contents) in place when processes were upgraded. At Area 4, various tanks, process lines, a cistern and an open-ended stormwater sewer drain all were removed during remediation activities. It is speculated that the production tanks, and lines may have contributed to contamination encountered as they deteriorated underground and leaked their contents into the subsurface. Migration of any contamination released was likely enhanced by the open-ended stormwater sewer line that was collocated in this Area 4 (at depth) too. The presence and variety of the structures within Area 4 may have worked together to establish a unique pathway for greater downward migration of any contamination present.
- The final documents submitted on June 23, 2016 and July 7, 2016 have provided the necessary information to resolve the issues noted below. Relevant information included (1) adoption of residential use standard (criteria) on main plant parcel only; (2) backfill source quality documentation; and (3) Jacobs Geophysical Report (2015).
  - No details have been provided on the application of Industrial versus Residential Cleanup Goals or C-P's RAP amendment documenting procedures for data re-evaluation or impact on remediation performed.
  - Backfill source material used did not come with a 'clean' certificate, or any quality documentation.
  - Lack of proper compaction procedures and testing by ERM (and subcontractors) during backfilling operations led to the failure of 11 areas for insufficient compaction. Designated EBC areas for Excavation, Backfill and Compaction. In each EBC the unacceptable soils (too moist) were removed and new backfill material was brought onsite to replace it and properly compact it to complete this work.
  - Unclear if contaminated spoil piles were kept secure and separate from the other backfill materials. Monthly report 16 states that contaminated soils from Area S were used to backfill where a pipe and trees were removed from the property's western side. PID meter readings measured by Jacobs of this material show 10-20 ppm total volatiles prior to its use as backfill. PID readings of soils after placement were lower. Unfortunately, this data is not comparable to the medium to heavy fractions of TPH contamination that is associated with Area S. The PID meter measurements are expected to be much lower than the appropriate TPH values.
  - Jacobs performed a couple of geophysical techniques in the footprint of the new Embassy building area. All other Site areas were noted as similarly evaluated by C-P (contactor) and was referred to as the 'local GPR' data. C-P did not share the local GPR results to date, making it impossible for DOS-OBO to evaluate if additional subsurface structures remain, especially in areas where property resale is possible.

CONCLUSIONS / RECOMMENDATIONS

1. Documentation received from DOS-OBO for the C-P Site was initially inadequate. However, C-P recently provided key documents covering the Ground Penetrating Radar excavations, the backfill soil quality and backfill compaction results within the June 23, 2016 Delivery of technical documentation; and final confirmation soil sample results and conclusions within the July 7, 2016 Delivery of Environmental Remediation information, documenting site resolution in accordance with the Mexican Ministry of the Environment and Natural Resources (SEMARNAT).
2. The largest sources of contamination for the C-P site have resulted from improper closure of retired fuel systems and process tanks and associated distribution lines. Remediation and demolition activities performed by C-P have removed several major sources of contamination from the property and have achieved resolution from the Mexican Ministry of the Environment and Natural Resources for residential use for the main plant parcel and commercial/industrial use of the external parking lot parcel. The current GPR data quality and level of site coverage will help confirm if any further substructures (which may contain waste materials) are present.
3. According to DOS-OBO personnel at the July 20, 2016 meeting, DOS-OBO chose not to perform any independent measurements of the contamination onsite. Therefore, no split soil samples or independent screening of samples in the field with PID (photo-ionization detector) meter were available to confirm Site conditions. **Recommend** consideration be given to taking soil samples during the construction of the new Embassy Building to confirm Site conditions within this footprint. In addition, soil samples can be applied to provide results that target areas where contamination is suspected or encountered during the excavation and/or grading work.
4. The advantages of this property balance the uncertainties associated with the site, if potential risks are mitigated. **Recommend** a thorough review of existing local-GPR data and/or generation of new geophysical data across the site, as needed, to determine if remaining subsurface structures are present, and evaluate if additional soil sampling/analyses during construction are needed to determine if Site conditions are acceptable for DOS future use of the property.

APPENDIX B: OVERSEAS BUILDINGS OPERATIONS RESPONSE

United States Department of State

Washington, D.C. 20520

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NOV 10 2016

TO: OIG/AUD – Norman P. Brown

FROM: OBO – Jürg E. Hochuli

SUBJECT: Draft Management Assistance Report: Evaluation of the Environmental Studies and Test Results for the Site of the New U.S. Embassy in Mexico City, Mexico

Thank you for the opportunity to review and comment on the draft Management Assistance Report for Mexico City. OBO is committed to providing any further information on this topic that the OIG may require. In April 2015, OBO provided briefings for House Oversight and Government Reform Committee staff on this topic – OBO gave a briefing on the overall site acquisition process, and then followed up with a specific briefing on the Mexico City site acquisition. Attached are OBO's comments on the subject report and its recommendations.

Attachment:

As stated.

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Drafted by: OBO/RM/P: J.Pette, x55105 OBO Trac #2016-
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OBO Response to Draft OIG Management Assistance Report: Evaluation of the Environmental Studies and Test Results for the Site of the New U.S. Embassy in Mexico City, Mexico – October 2016

The acquisition of the Colgate-Palmolive (C-P) property for the Mexico City NEC is a success story for OBO and the culmination of a ten-year effort by the Department. The site acquisition is a critical step for providing a new, safe, and secure U.S. diplomatic facility for personnel in Mexico City. The Colgate-Palmolive property is in a location well-suited to our Mission, within the burgeoning, redeveloping North Polanco neighborhood, which is centrally located, in close proximity to Mexican government offices, and will allow us to build a New Embassy Compound fully compliant with security standards. Cushman & Wakefield, the international real estate firm, confirmed the estimated value has increased by at least $65,000,000 above the U.S. government's purchase price of $120,000,000.

OBO submits the following comments regarding the Conclusions / Recommendations section in the U.S. Army Corps of Engineers Environmental Documentation Review, dated September 29, 2016.

1. *Documentation received from DOS-OBO for the C-P Site was initially inadequate. However, C-P recently provided key documents covering the Ground Penetrating Radar excavations, the backfill soil quality and backfill compaction results within the June 23, 2016 Delivery of technical documentation; and final confirmation soil sample results and conclusions within the July 7, 2016 Delivery of Environmental Remediation information, documenting site resolution in accordance with the Mexican Ministry of Environment and Natural Resources (SEMARNAT).*

   Between July 19, 2016, and August 30, 2016, after the OIG and U.S. Army Corps of Engineers prepared a draft report of their findings, OBO received 25 binders of technical documents that were essential in providing more accurate information regarding the status of the site. Colgate-Palmolive was not required to provide any information before this time, nor would it have made sense to do so prior to the completion of its findings. As further documents were made available, OBO provided them to the OIG in a timely manner.

   The OIG draft Management Assistance Report was critical of the fact that many of the documents that OBO provided were in Spanish. To better

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manage the project timeline and contract dates, OBO retained a reputable international consultant with bilingual capability, Jacobs Engineering Group (Jacobs), to review all original Spanish language documents. Obtaining translations of these thousands of pages of documents would have delayed OBO's timely submission of these documents to the OIG by months.

2. *The largest sources of contamination for the C-P site have resulted from improper closure of retired fuel systems and process tanks and associated distribution lines. Remediation and demolition activities performed by C-P have removed several major sources of contamination from the property and have achieved resolution from the Mexican Ministry of the Environment and Natural Resources for residential use for the main plan parcel and use of the external parking lot parcel. The current GPR data quality and level of site coverage will help confirm if any further substructures (which may contain waste materials) are present.*

   SEMARNAT issued a "clean" certificate on July 21, 2016, stating that the property environmental remediation had been completed in accordance with the Remediation Action Plan established under Mexican law. OBO's contractor, Jacobs, monitored Colgate-Palmolive's demolition and remediation from May 2014 to September 2016. Jacobs concluded, "Based on our on-site observations, no known structures, foundations, tanks, or buried utilities were left in place." (p. 16; Jacobs Ready to Build Review Report, dated August 31, 2016[1])

3. *According to DOS-OBO personnel at the July 20, 2016 meeting, DOS-OBO chose not to perform any independent measurements of the contamination onsite. Therefore, no split soil samples or independent screening of samples in the field with PID (photo-ionization detector) meter were available to confirm Site conditions.* ***Recommend*** *consideration be given to taking soil samples during the construction of the new Embassy Building to confirm Site conditions within this footprint. In addition, soil samples can be applied to provide results that target areas where contamination is suspected or encountered during the excavation and/or grading work.*

   All soil samples were taken and tested by reputable independent companies. Jacobs confirms that "ERM was the technical party responsible for conducting all remediation activities within the area, while INTERTEK was

[1] All page references refer to the Jacobs Ready to Build Review Report, dated August 31, 2016.

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the accredited lab to conduct all tests until the target was achieved in all areas; both companies are reliable and well known in the Mexico City construction sector." (p. 20)

OBO is confident that all known and identifiable sources of contamination were removed. OBO does not believe that additional soil sampling is necessary, based on the SEMARNAT assessment of the environmental remediation efforts and Jacobs' report, which specifically recommends against it (p. 23-24):

> "Jacobs recommended in our RAP Translation, Interpretation and Review report that DoS forego confirmatory sampling unless our onsite observations identified suspect material that CP refused to address…Jacobs never found it necessary to recommend confirmatory sampling…Jacobs still does not recommend conducting an additional sampling campaign." (p. 23-24)

Additionally, the Department's Office of Safety, Health, and Environmental Management considers this a low-risk site, given its prior use and the types of contaminants identified in the samples. During construction, if any contaminants above the allowable level were to be found on site, Colgate-Palmolive would be required to indemnify the U.S. government for all environmental liabilities caused by (1) Colgate-Palmolive's past use of the property or (2) Colgate-Palmolive's remediation of the property. OBO provided a copy of the revised Promissory Purchase Agreement to the OIG in December 2015.

4. *The advantages of this property balance the uncertainties associated with the site, if potential risks are mitigated.* ***Recommend*** *a thorough review of existing local-GPR data and/or generation of new geophysical data across the site, as needed, to determine if remaining subsurface structures are present, and evaluate if additional soil sampling/analyses during construction are needed to determine if Site conditions are acceptable for DOS future use of the property.*

OBO does not agree with the recommendation to review of GPR data further and has determined that additional soil sampling would be unnecessary.

Regarding a further review of GPR data, OBO is confident that subsurface structures have been removed. Jacobs stated the following in its final report:

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> "Based on our on-site observations and both Jacobs' and CP's GPR and EMI investigations, Jacobs is confident that all major structures, foundations, etc. have been removed from the site." (p. 18)

OBO does not believe that additional soil sampling is necessary, based on the SEMARNAT assessment of the environmental remediation efforts and Jacobs' report, which specifically recommends against additional soil sampling (p. 23-24). Additionally, the Department's Office of Safety, Health, and Environmental Management considers this a low-risk site, given its prior use and the types of contaminants identified in the samples. During construction, if any contaminants above the allowable level were to be found on site, C-P would be required to indemnify the U.S. government for all environmental liabilities caused by (1) C-P's past use of the property or (2) C-P's remediation of the property.

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