

# Sector San Juan



## 2013 Guayanilla Bay (Costa Sur) Mystery Spill

LTJG Farris

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## Guayanilla Bay Mystery Spill

### Overview:

- History
- Initial Investigation
- Response Efforts
- Determining a Responsible Party
- Results and Current Status
- Questions/Comments



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## Guayanilla Bay Mystery Spill

### History:

On March 7, 2013, during heavy rains, Puerto Rico Energy Power Authority (PREPA) Costa Sur facility witnessed and reported an oil sheen spreading across Guayanilla Bay in Guayanilla, PR in the vicinity of their facility.



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### Initial Investigation:

PREPA Costa Sur informed the USCG at Sector San Juan that this sheen has been persistent in heavy rains for over nine years.

PREPA has been deploying their own response equipment to keep their water intakes clear of oil, utilizing boom and sorbent pads during heavy rain storms.

There is a record of a past report (October 2010) by the USCG that the sheen is a “mystery” following heavy rains and that PREPA was not responsible.



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### Initial Investigation:

On March 14, the USCG was able to identify a storm drain basin with pooled oil near the discharge point in Guayanilla Bay, as a linkage to the source.

A Federal Project was opened for Phase II and III operations until a Responsible Party could be identified.



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### Initial Investigation:

From March 15 through the 19, the USCG, the EPA, and the Puerto Rico Environmental Quality Board (EQB) conducted a joint-agency investigation to determine the source of the oil.

From this investigation, three potential Responsible Parties were identified in the area: PREPA Costa Sur, Commonwealth Oil Refining Company (CORCO), and a facility undergoing excavation owned by Shell Energy North America.



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### Initial Investigation:



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### Response Efforts:

On April 8, 2013 PREPA Costa Sur voluntarily conducted oil recovery operations to remove oil from the contaminated storm drain in order to prevent further discharge. They notified Sector San Juan that during removal operations they pumped over 2,000 gallons of an oily water mixture, after which time the flow of product through the storm drain continued to be continuous. This caused them to cease operations.



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### Response Efforts Continued:

For containment and removal, the USCG FOSC contracted Clean Harbors Environmental, Inc. On April 9, Clean Harbors removed an additional 2,500 gallons of an unknown oily water substance from the storm drain.

The substance, again, continued to flow at a constant rate after pumping ceased. The FOSCR on scene determined the discharge was not the point source and was potentially coming from a plume. The storm drain was capped with dirt to prevent further pollution into the Guayanilla Bay until further analysis of the area could be conducted.



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### Geo-probing:

Due to EPA's resident expertise on ground source surveys, USCG issued a Pollution Removal Funding Authorization (PRFA) to the EPA to sample the area utilizing geo-probing techniques to conclusively identify the source and path of discharge



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### Geo-probing:

During the week of April 22, Sector San Juan FOSCR and the EPA conducted geo-probing at the discharge source.



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### Geo-probing:

Head readings of samples taken via the geo-probe showed high concentration of hydrocarbons at the beginning of the water table. The FOSCR traced the path of higher concentrations of hydrocarbons back to Shell's and CORCO's property on route PR127.

After meeting with representatives of both, sampling of monitoring wells located around each facility was conducted. Samples taken showed a similar concentration and appearance to oil samples taken from the storm drain basin and outflow. All samples taken throughout the week were sent off to EPA's lab on April 30, 2013 for a fingerprint analysis



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### Monitoring Wells:



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### Determining a Responsible Party:

On May 16, 2013 the samples taken from the monitoring wells and the storm drain returned from the EPA lab inconclusive.

On June 7 the liquid samples were shipped from the EPA lab to the USCG Marine Safety Lab for additional analysis. On June 18, the soil samples were also sent.



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### Results:

On June 19, the final results from the MSL on the liquid analysis concluded that there was no conclusive match from any of the samples provided and the discharge source.

Similarly, on June 24 the soil samples came back with the same conclusion.





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### Conclusion and Current Status:

As of June 26, the case has been deferred from the USCG to the EPA, based on an earlier agreement that if no Responsible Party was identified, the EPA OSC would assume responsibility of the case.

The storm drain remains capped with soil as a temporary containment method. PREPA continues to boom the outflow as a precautionary measure.



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Questions/Comments?



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