1 2		ES DISTRICT COURT OF PUERTO RICO
3	JORGE FRANCISCO SANCHEZ;	
4	DOLORES SERVICE STATION	
5	AND AUTO PARTS, INC.,	
6		Civil No. 08-2151 (JAF)
7	Plaintiffs,	
8	v.	
9	ESSO STANDARD OIL COMPANY	
10	(PUERTO RICO),	
11		
12	Defendant.	

## **OPINION AND ORDER**

14 This is a civil action brought by Jorge Francisco Sánchez and Dolores Service Station 15 and Autoparts, Inc., hereinafter collectively referred to as "the Station," against Esso Standard 16 Oil Company (Puerto Rico) ("Esso") under the citizen suit provision of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6972. The Station alleges that releases 17 of petroleum product from three underground storage tanks ("USTs"), formerly owned by Esso, 18 19 caused the contamination of soil and groundwater at and near the Station's property ("the 20 property"). The Station seeks injunctive relief and the imposition of civil penalties for alleged 21 violations of the Solid Waste Disposal Act (the "Act"), as amended by RCRA, 42 U.S.C. 22 §§ 6901-6992k, and Commonwealth and federal regulations governing notification and

corrective action requirements for releases from USTs.<sup>1</sup> On August 5, 2009, we granted the 1 2 Station's oral motion for an evidentiary hearing to address the quality and reliability of 3 analytical data generated in the parties' court-ordered, joint environmental site assessment ("ESA"). (See Docket No. 154.) The evidentiary hearing commenced on September 17, 2009, 4 and ended the same day. Also before the court are "Esso's Second Motion Seeking the 5 Imposition of a Security Bond Pursuant to F.R.C.P. Rule 65(C)" ("Esso's Second Motion for 6 7 Security") (see Docket Nos. 151 and 191), which Plaintiffs oppose (see Docket No. 166), and 8 "Esso's Motion in Limine as to Testimony of ERM's José Hernández" ("Esso's Motion in 9 Limine") (Docket No. 208), which Plaintiffs oppose (see Docket No. 213). Having thoroughly reviewed the record and with particular consideration of testimony proffered at the 10 11 September 17, 2009, hearing, the court finds the data generated to date in the ESA to be valid and otherwise reliable.<sup>2</sup> 12

<sup>&</sup>lt;sup>1</sup> Any person who violates any requirement of subchapter III of the Solid Waste Disposal Act, 41 U.S.C. § 6901 *et seq.*, as amended by RCRA, shall be liable to the United States for a civil penalty in an amount not to exceed \$25,000 per violation, with each day constituting a separate violation. 42 U.S.C. § 6928(g). A federal district court may impose civil penalties authorized under section 6928(g) in RCRA citizen suits. *See* 42 U.S.C. 6972(a); *Davis v. Sun Oil Co.*, 953 F.Supp. 890, 893 (S.D. Ohio 1996) ("§ 6972(a) permits the imposition of a civil penalty in an action brought by a private party").

<sup>&</sup>lt;sup>2</sup> As stated by Justice Blackmun in *Daubert v. Merrell Pharmaceuticals*, "in a case involving scientific evidence, evidentiary *reliability* will be based on scientific *validity*." 509 U.S. 579, 589 n.9 (1993) (emphasis supplied).

1 2	I.
3	<b>Factual and Procedural Background</b>
4	Plaintiffs' 0.77-acre parcel of property is located at Km. 14 of northbound highway PR-3
5	in the municipality of Canóvanas, Puerto Rico. The property is situated approximately thirty-
6	five feet above sea level and between 2,500 to 3,300 feet from the Río Grande de Loíza
7	waterway, <sup>3</sup> which flows into the Atlantic Ocean. The property has been used for the operation
8	of a gasoline-dispensing service station since the early 1960s.
9	In 1985, Esso replaced Shell Oil as the gasoline and diesel supplier for Dolores Service
10	Station. On or about the same date, Esso acquired ownership of three USTs located on the
11	property, including two 10,000-gallon capacity, steel USTs used to store gasoline and one UST
12	used to store combustible diesel. Esso served as the supplier of gasoline and diesel for Dolores
13	Service Station until October 2008. At or about that time, Esso sold the three USTs.
14	Since Esso became the supplier for Dolores Service Station in 1985, each of the three
15	USTs at the property has been removed and replaced at least once. In August 1992, Esso
16	removed and replaced the combustible diesel UST located in the southeast corner of the
17	property with a 6,000-gallon capacity, double-walled, fiberglass UST. (See Docket No. 24;
18	Plaintiffs' Ex. No. 2.) In January 1998, Esso removed and replaced the two 10,000-gallon

<sup>&</sup>lt;sup>3</sup> The record contains varying estimates of the distance between the property and the Río Grande de Loíza.

capacity USTs located on the southwest corner of the property with two 12,000-gallon USTs.
 (*Id.*)

3

## A. <u>Prior Site Assessments and Investigations</u><sup>4</sup>

The record in this case is replete with environmental investigations and monitoring activity carried out at the property. To emphasize the significance of findings in the more recent court-ordered ESA, we review the relevant findings and conclusions from historical investigations and monitoring activities.

In February 1993, Esso commenced a monthly groundwater monitoring program at the 8 9 property. The program incorporated three monitoring wells, two (MW-1, MW-2) located near 10 the combustible diesel tank and one (MW-3) located near the gasoline USTs. Monthly 11 groundwater monitoring reports indicate that between February 1993 and December 1997, Esso or its representative periodically measured organic vapor in the three wells at concentrations up 12 13 to 32,000 ppm. The reports also indicate that Esso or its representative detected a dark film in 14 MW-3 during the months of June, October, and December of 1995. There is no evidence in the record indicating what immediate action, if any, Esso took in response to these findings. There 15 16 is also no evidence we could find in the record indicating when, if at all, Esso notified the Puerto Rico Environmental Quality Board ("EQB") regarding these findings. 17

 $<sup>^4</sup>$  See plans detailing most of the well locations addressed in this opinion (Docket Nos. 150-4 and 152 (Figure 1)).

1	In January and February 1998, Esso contracted Environmental Resources Technologies
2	("ERTEC") to evaluate the condition of subsurface soil following the removal of the two
3	10,000-gallon USTs. <sup>5</sup> ERTEC incorporated its findings and conclusions into a "Report on
4	Removal of Underground Storage Tanks" ("Removal Report"), dated May 5, 1998. (See
5	Docket No. 24; Plaintiffs' Exhibit No. 2.) According to the Removal Report, ERTEC's
6	evaluation included an OVA field analysis for nine soil samples and laboratory analyses of eight
7	boring samples for the following constituents: Benzene, toluene, ethyl benzene, and xylenes
8	(collectively, "BTEX"), and petroleum hydrocarbons in the gasoline range ("TPH-GRO").
9	OVA field analyses detected organic vapor in soil at concentrations between 3.8 and 37 ppm. <sup>6</sup>
10	ERTEC concluded that the organic vapor concentrations were below the 100 ppm limit
11	established as acceptable by the EQB. Laboratory analysis detected no concentration of BTEX
12	or TPH-GRO above detectable limits. Based on these results, ERTEC recommended that
13	additional work not be carried out at the site.
14	By letter dated May 14, 1999, Marla Y. Rivera, Esso's Environmental Services

By letter dated May 14, 1999, Marla Y. Rivera, Esso's Environmental Services Supervisor, advised Katherine Batista, then head of the EQB's Underground Tanks Program,

<sup>&</sup>lt;sup>5</sup> By letter dated June 6, 1997, Carlos I. Figueroa, then lead engineer in Esso's Environmental Section, informed Katherine Batista, then Director of the EQB's Underground Tanks Program, that it planned to replace the two gasoline USTs with two 12,000-gallon USTs with design features intended "to prevent contamination of the subsoil and possible leaks." Features enumerated in the letter included: "(1) overfill prevention equipment, (2) Veeder Root equipment for interstitial monitoring of the double fiberglass wall tank, slump riser, and dispenser area, and (3) "Enviroflex' lines with primary and secondary system, . . . installed with a slope toward the tank's Slump Riser to collect any leakage of product in the lines." (*See* Defendant's Ex. No. 7.)

<sup>&</sup>lt;sup>6</sup> ERTEC collected samples for OVA field analysis from depths of eight to thirteen feet below grade.

1	that based on the 1998 testing, "it is not necessary to carry out additional environmental work
2	in the indicated area." (Docket No. 25; Defendant's Ex. No. 9.) In the same letter, Esso
3	requested an "environmental release" for the "tanks replacement area" ( <i>i.e.</i> , the gasoline UST
4	area). By letter dated August 31, 2001, Yvonne Santiago, then Director of the EQB's Water
5	Quality Division, granted Esso's request for an environmental release for the removal site,
6	noting that the 1998 testing results were, in fact, below regulatory limits. Under the terms of
7	the release, Esso was no longer obligated to conduct further environmental study at the removal
8	site. (See Docket No. 25; Defendant's Ex. No. 10).
9	In 2001, Esso contracted ERTEC to investigate the condition of soils in the vicinity of
10	the diesel UST. (See Docket No. 24; Defendant's Ex. No. 2.) ERTEC'S findings and
11	conclusions from the investigation are incorporated into a report dated February 13, 2003.
12	ERTEC's investigation occurred on November 7 and 9, 2001, and required the collection of soil
13	samples from four borings drilled on each side of the diesel UST. <sup>7</sup> The results of an analytical
14	run on those samples indicate the presence of petroleum hydrocarbons in the diesel range
15	("TPH-DRO") in each sample at concentrations ranging from 40 mg/kg to 3,290 mg/kg. <sup>8</sup> Based
16	on these findings, ERTEC concluded that: (1) the concentrations of hydrocarbons in the subsoil
17	were "above the criteria of cleanliness typically accepted by the Environmental Quality Board

<sup>&</sup>lt;sup>7</sup> ERTEC collected samples every two feet up to a depth of 18 to 20 feet below grade. OVA field analysis determined whether laboratory analysis would be requested.

<sup>&</sup>lt;sup>8</sup> The samples testing positive for TPH-DRO were collected between 10 and 20 feet below grade.

1	(EQB)"; and (2) the contamination "can be connected to leaks coming from the system and tank
2	line located to the east of the station or from the one previously replaced in 1992." (Docket
3	No. 24; Defendant's Ex. No. 2.) ERTEC recommended both integrity tests to the tank and
4	diesel lines and "a risk base study to identify the possible recipients at the site and to
5	evaluate the need, if any, to do additional work." (Id.) There is no evidence in the record
6	indicating when, if at all, Esso conducted the recommended integrity tests or surveyed possible
7	receptors of subsurface contamination. However, the record does include a "Sensitive Receptive
8	Survey" ("SRS"), completed for the property on December 8, 2005.9 (See Docket No. 24;
9	Defendant's Ex. No. 4.)
10	By letter dated February 21, 2003, Marluz López, Esso's Remediation Coordinator,
11	informed Katherine Batista of the EQB that Esso would be carrying out an additional
12	environmental assessment at the diesel UST site to determine the extent of the hydrocarbon
13	contamination and would be ready to submit a remediation plan with applicable alternatives if
14	necessary. (See Docket No. 25; Defendant's Ex. No. 11.) There is no documentation in the
15	record to indicate that Esso completed an additional environmental assessment at the diesel UST
16	site in 2003, 2004 or 2005.

<sup>&</sup>lt;sup>9</sup> The SRS inventoried information regarding potential receptors of hydrocarbon contamination, including, without limitation: (1) the presence of a regional aquifer located less than 20 feet below grade; (2) no municipal water wells located within 2,000 feet of the property; (3) no private water wells located within 1,000 feet of the property; (4) no utility vaults located on or adjacent to the property; (5) no surface bodies of water located within 1,000 feet of the property; (6) no storm water drains located on or adjacent to the site; (7) the presence of sanitary lines located on the southeast side of the facility and along PR-3. The nearest potable water extraction well, identified as Santa Bárbara (52-WW-03), would appear to be located approximately 3,300 feet north of the station, on the south side of the Río Grande de Loíza. (Docket No. 24; Plaintiffs' Ex. No. 5.)

1	In September 2006, Esso contracted ERTEC to evaluate the condition of soil and
2	groundwater at the property. ERTEC incorporated its findings and conclusions into a Phase II
3	Environmental Evaluation (the "Phase II Evaluation"), dated November 14, 2006. (Docket
4	No. 24; Plaintiff's Ex. No. 5.) ERTEC's evaluation required the drilling of eleven soil borings,
5	five of which were used for the installation of monitoring wells (MW-101, MW-102, MW-103,
6	MW-104, MW-105). Laboratory analyses were run on soil and groundwater samples for BTEX,
7	TPH-GRO, TPH-DRO and TPH-oil. ERTEC's findings included: (1) aromatic hydrocarbon
8	detected in six soil borings at concentrations ranging from non-detectable to 2,000 ppm;
9	(2) TPH-GRO and TPH-DRO in two soil samples at concentrations of 5.4 ppm and 93 ppm,
10	respectively; <sup>10</sup> and (3) benzene in groundwater at concentrations measuring up to 2,800 ug/l (at
11	MW-101). ERTEC concluded that the concentrations of TPH-GRO and TPH-DRO detected
12	in soil were below the cleanliness criteria of 100 mg/kg typically accepted by the EQB, and that
13	concentrations of benzene in groundwater exceeded the federal drinking water standard of 5
14	ug/l. ERTEC also concluded that the groundwater contamination appeared to be related to
15	releases from the USTs and possibly releases from the grease traps located in the northeast area
16	of the property (See Docket No. 24; Plaintiffs' Ex. No. 5). Notwithstanding the Phase II
17	Evaluation, by letter dated November 15, 2006, Carlos Figueroa, Esso's Remediation
18	Coordinator, sought confirmation from Katherine Batista of the EQB that no additional
19	environmental activities needed to be completed at the site. In his letter, Mr. Figueroa requested

<sup>&</sup>lt;sup>10</sup> SB-3 (8-10) and SB-7 (6-8).

1	an environmental release for the property. (See Docket No. 25; Defendant's Ex. No. 12.)
2	There is no indication in the record that Ms. Batista confirmed Mr. Figueroa's understanding
3	or granted his request for an environmental release.
4	Under cover dated November 27, 2007, Mr. Figueroa submitted a Corrective Action Plan
5	("CAP") <sup>11</sup> to Ms. Batista. (See Docket No. 24; Plaintiffs' Ex. No. 6.) The CAP's stated
6	objective is "to determine the extent of the hydrocarbons dissolved in the underground water
7	and to promote the reduction thereof through the application of the bio-remediation method
8	known in English as ORC (Oxygen Release Compound)." (Id.) It is unknown whether the
9	EQB requested the CAP or whether Esso provided it of its own accord. There is no indication
10	in the record that that the EQB ever approved Esso's proposed CAP.
10 11	in the record that that the EQB ever approved Esso's proposed CAP. In May 2008, ERTEC conducted groundwater sampling in accordance with the CAP at
11	In May 2008, ERTEC conducted groundwater sampling in accordance with the CAP at
11 12	In May 2008, ERTEC conducted groundwater sampling in accordance with the CAP at five existing wells (MW-101, MW-102, MW-103, MW-104, MW-105), which are located at
11 12 13	In May 2008, ERTEC conducted groundwater sampling in accordance with the CAP at five existing wells (MW-101, MW-102, MW-103, MW-104, MW-105), which are located at the southern end of the property. Monitoring results are incorporated into a "Progress Report,"
11 12 13 14	In May 2008, ERTEC conducted groundwater sampling in accordance with the CAP at five existing wells (MW-101, MW-102, MW-103, MW-104, MW-105), which are located at the southern end of the property. Monitoring results are incorporated into a "Progress Report," dated July 16, 2008. ( <i>See</i> Docket No. 24; Defendant's Ex. No. 5.) Under cover dated
11 12 13 14 15	In May 2008, ERTEC conducted groundwater sampling in accordance with the CAP at five existing wells (MW-101, MW-102, MW-103, MW-104, MW-105), which are located at the southern end of the property. Monitoring results are incorporated into a "Progress Report," dated July 16, 2008. ( <i>See</i> Docket No. 24; Defendant's Ex. No. 5.) Under cover dated August 13, 2008, Esso submitted the Progress Report to Ms. Batista of the EQB. ( <i>See</i> Docket

<sup>&</sup>lt;sup>11</sup> CAPs are submitted in accordance with Rule 607 of the Underground Tanks Regulation of the EQB, which provides, in part, "[t]he EQB will approve the corrective action plan only after ensuring that implementation of the plan will adequately protect human health and safety, and the environment."

1	2006 Phase II Evaluation. <sup>12</sup> Based on these findings, ERTEC identified two areas of
2	groundwater affected by hydrocarbon contamination, one in the northwest corner of the property
3	(by MW-102) and one situated east of the diesel UST (by MW-104). During the 2006 Phase
4	II Evaluation, ERTEC also measured several water quality indicators to assess the suitability
5	of ORC technology. (Docket No. 24; Plaintiffs' Ex. No. 5.) Finding conditions favorable for
6	the application of ORC technology, ERTEC installed mesh with the ORC compound in each
7	of the five monitoring wells following the May 2008 sampling.
8	B. <u>The Present Action</u>
9	The Station filed the present suit on October 6, 2008, under two causes of action. The
10	Station's first cause of action is based on alleged violations of the EQB's Underground Storage
11	Tank Regulations ("USTR"), see P.R. Admin. Regulation 4362 Rules 501, 503, 601, 602(A)-
12	(B), 603(A), 604(A)-(B), and 606(A) (1) (3), <sup>13</sup> and their federal counterparts, 40 C.F.R. §§

 $<sup>^{12}</sup>$  *E.g.*, compare the 464 ug/l detected in the sample collected from MW-101 in 2008 to the 2,800 ug/l detected in MW-101 during the 2006 Phase II Evaluation.

<sup>&</sup>lt;sup>13</sup> Rule 501 reads, in pertinent part, as follows: "Owners and operators must report to the Board within 24 hours, and follow the procedures in Rule 503 for any of the following conditions: A. The discovery by owners and operators or others of released regulated substances at the UST site or in the surrounding area (such as free product or vapors in soils, basements, sewer and utility lines, and nearby surface waters)."

Rule 503 reads, in part, as follows: "Unless corrective action is initiated in accordance with Part VI, owners and operators must immediately investigate and confirm all suspected releases of regulated substances requiring reporting under Rule 501 within seven (7) days, using either the following steps or another procedure approved by the Board . . . ."

Rule 601 reads as follows: "Owners and operators of petroleum or hazardous substances UST systems must, in response to a confirmed release from the UST systems must, in response to a confirmed release from the UST system, comply with the requirements of this Part except for UST's excluded under Rule 103(B) and UST systems subject to RCRA Subtitle C corrective action requirements under Section 3004(u) of the Resource Conservation and Recovery Act, as amended."

Rule 602 reads as follows: "Upon confirmation of a release in accordance with Rule 503 or after a release from the UST system is identified in any other manner, owners and operators must perform the following

## 280.50, -.52, -.60 to -.63, and -.65 (2010). These regulations impose notification and corrective

initial response actions within 24 hours of a release. A. Report the release to the Board (e.g.) by telephone or electronic mail; B. Take immediate action to prevent any further releases of the regulated substance into the environment; and C. Identify and mitigate fire, explosion and vapor hazards."

Rule 603 reads as follows: "A. Unless directed to do otherwise by the Board, owners and operators must perform the following abatement measures: 1- Remove as much of the regulated substance from the UST system as is necessary to prevent further release to the environment; 2- Visually inspect any above-ground releases or exposed below-ground releases and prevent further migration of the released substance into surrounding soils and groundwater; 3- Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures (such as sewers and basements); 4- Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of oils, the owner and operator must comply with all applicable Board and other local and federal agencies requirements; 5- Measure for the presence of a release where contamination is most likely to be present at the UST site, unless the presence and source of the release have been confirmed in accordance with the site check required by Rule 503(B) or the closure site assessment of Rule 703(A). In selecting sample types, sample locations, and measurement methods, the owner and operator must consider the nature of the stored substance, the type of backfill, depth to groundwater and other factors as appropriate for identifying the presence and source of the release. If these activities include drilling and installation of groundwater monitoring and or extraction wells, the owner and operator must comply with the procedures established by Law No. 136, of June 3, 1976 (Water Law of Puerto Rico) for the application of permits and franchises; and 6- Investigate to determine the possible presence of free product, and begin free product removals as soon as practicable and in accordance with Rule 605."

Rule 604 reads as follows: "A. Unless directed to do otherwise by the EQB, owners and operators must assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in Rule 601 and Rule 602. This information must include, but is not necessarily limited to, the following: 1- Data on the nature and estimated quantity of release; 2- Data from available sources and/or site investigations concerning the following factors: surrounding populations, water quality, size and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions, and land use. 3- Results of the site check required under Rule 603(A)(5); and 4- Results of the free product investigations required under Rule 603(A)(6), to be used by owner and operators to determine whether free product must be recovered under Rule 605. B. Within 45 days of release confirmation, owners and operators must submit the information collected in compliance with paragraph (A) of this Rule to the Board in a adequacy, or in a format and according to the schedule required by the Board."

Rule 606 reads as follows: "A. In order to determine the full extent and location of soils contaminated by the release and the presence and concentrations of dissolved product contamination in the groundwater, owners and operators must conduct investigations of the release, release site, and the surrounding area possibly affected by the release if any of the following conditions exist: 1- There is evidence that groundwater wells have been affected by the release (e.g., as found during release confirmation or previous corrective action measures); 2- Free product is found to need recovery in compliance with Rule 605; 3- There is evidence that contaminated soils may be in contact with groundwater (e.g., as found during conduct of the initial response measures or investigations required under Rule 601 through 605); and 4- The EQB requests an investigation based on the potential effects of contaminated soil or groundwater on nearby surface water and groundwater resources. B. Owners and operators must submit the information collected under paragraph (A) of this Rule as soon as practicable or in accordance with a schedule established by the Board."

action requirements on owners and operators of USTs in the event of a suspected release. The 1 2 Station's second cause of action is based on two alleged violations of the Solid Waste Disposal 3 Act, 42 U.S.C. 6901-6992k. First, the Station alleges that Esso "contributed to the generation, handling, storage, treatment, transportation and disposal of solid or hazardous waste" in a 4 manner that presents or may present a danger to human health and the environment in violation 5 6 of the Act. Second, the Station alleges that Esso has improperly stored and disposed of gasoline 7 and diesel products at a non-permitted facility in violation of subchapter III of RCRA. As 8 remedy, the Station requests, *inter alia*, that Esso be enjoined and restrained from causing any 9 further release or discharge of hazardous waste and be compelled to comply with the abovelisted regulations and conduct all necessary testing and corrective action to remove and 10 11 eliminate all pollution and contamination. On December 5, 2008, we granted the Station's motion for injunctive relief, ordering the 12

12 On December 5, 2008, we granted the Station's motion for injunctive relief, ordering the
13 parties to undertake, at Esso's expense, a joint environmental site assessment ("ESA") to
14 delineate the full extent of soil and groundwater contamination at and near Plaintiffs' property.
15 (*See* Docket No. 22.) Pursuant to our order, the parties submitted written motions
16 recommending persons and companies to perform the assessment. (*See* Docket Nos. 27; 29.)
17 On December 22, 2008, we then ordered that the parties' comprehensive site assessment team
18 (the "team") would be composed of the consultant On-Site Environmental, Inc. ("On-Site"),

1	Ricardo N. Álvarez, P.E., REM, <sup>14</sup> and Rafael Cruz Pérez, P.E., PPL, API, <sup>15</sup> for Plaintiffs, and
2	the consultant Environmental Resource Management ("ERM"), José A. Hernández, P.E.,
3	MsOHOS, <sup>16</sup> and ERM in-house geology staff for Esso. (See Docket No. 38.)
4	In January 2009, the parties submitted individual work plans and one joint work plan to
5	the court. (See Docket Nos. 49; 50; 54.) We approved the parties' joint work plan and field
6	activities to commence in February 2009. (See Docket No. 82-2.) The work plan requires the
7	drilling of twelve soil borings and the installation of ten groundwater monitoring wells for the
8	collection of soil and groundwater samples to be analyzed for the following constituents:
9	Benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX), Methyl tert-
10	butyl ether (MTBE), tetraethyl lead (TEL or "organic lead"), perchloroethene (PCE),
11	trichloroethene (TCE), dichloroethene (DCE), lead (Pb), and total petroleum hydrocarbon
12	(TPH). (See Docket No. 54.) The work plan also requires the collection and analysis of
13	groundwater samples from the five existing monitoring wells (MW-101, MW-102, MW-103,
14	MW-104, MW-105) which were constructed during the 2006 Phase II Evaluation.

<sup>&</sup>lt;sup>14</sup> Mr. Álvarez is a professional engineer and registered environmental manager. He is the President and General Manager of Operations for On-Site. (*See* Docket No. 29 (statement of qualifications).)

<sup>&</sup>lt;sup>15</sup> Mr. Cruz is a licensed professional engineer, professional planner, and energy auditor. He is an independent environmental engineering consultant.

<sup>&</sup>lt;sup>16</sup> Mr. Hernández is a licensed professional engineer and certified environmental auditor. He is the Director of Operations for ERM Puerto Rico. (*See* Docket No. 27-4.)

1	As agreed by Esso and the Station, ERM selected and contracted two laboratories to
2	provide analytical services — Columbia Analytical Services ("Columbia") and Friedman &
3	Bruya Laboratory ("Friedman"), hereinafter collectively referred to as "the labs." <sup>17</sup> Esso's
4	consultant, ERM, routed soil and groundwater samples to the labs from the field. Pursuant to
5	the parties' joint work plan, the labs were to use a specific EPA test method or, in certain cases,
6	a choice of two EPA test methods, in their analysis of the aforementioned constituents. By way
7	of example, the joint work plan designates test method "EPA 8021A or 8260" to be used for the
8	analysis of TEL. (See Docket No. 54-2.) Esso's and the Station's findings and conclusions
9	from the joint ESA are incorporated into separate ESA reports, submitted to the court on July 24
10	and August 3, 2009, respectively. (See Docket Nos. 150-3; 152.)
11	While the parties engaged in field studies pursuant to our preliminary injunction order
12	issued on December 5, 2008, the First Circuit entertained an interlocutory appeal by Esso
13	challenging that order (Docket No. 22). See Sánchez v. Esso Standard Oil Co. (P.R.), 572 F.3d
14	1 (1st Cir. 2009). In an opinion issued on June 19, 2009, the Court of Appeals upheld our
15	mandatory injunction for Esso to undertake an ESA at the Station. Id. at 20-21. Although
16	preliminary injunctions should usually preserve the status quo, the First Circuit noted that "the
17	status quo in cases of potential environmental contamination is not a 'condition of rest,' but one

<sup>&</sup>lt;sup>17</sup> Friedman analyzed samples for TEL and speciated lead compounds. Columbia analyzed samples for TPH, BTEX, MTBE, PCE, TCE, DCE, and lead.

1	'of action which, if allowed to continue or proceed unchecked and unrestrained, will inflict
2	serious irreparable injury." Id. at 21 (quoting United States v. Price, 688 F.2d 204, 212 (3d Cir.
3	1982)). The Court of Appeals "applaud[ed] this sensible step" because of "legitimate
4	concerns about the possibility of extensive environmental contamination and its health effects."
5	Id.
6	At the same time, the First Circuit vacated a portion of our order that "reflect[ed] an
7	improper adjudication on the merits of the dispute," id., because we consolidated the
8	preliminary injunction hearing with the trial on the merits, there being doubt on the record as
9	to whether fair clear notice of consolidation was afforded to Esso. The Court of Appeals then
10	directed us to assess the admissibility of the results of the ESA under the relevant rules and to
11	reconsider Esso's request for a security bond under Federal Rule of Civil Procedure 65(c). Id.
12	at 22. We duly heed the First Circuit's mandate and proceed to address these matters.
13	C. <u>ESA Findings and Recommendations</u>
14	We briefly note the parties' relevant findings, as reported by their respective consultants.
15	ERM and On-Site report: (1) no free phase petroleum products (i.e., gasoline, diesel or oil)
16	found in any well; (2) benzene in excess of the USEPA Primary Drinking Water Standard of
17	5 ug/l in groundwater samples from three wells (MW-102, MW-104, and MW-203); <sup>18</sup> and

<sup>&</sup>lt;sup>18</sup> On-Site erroneously reports five samples with benzene concentrations in excess of the primary drinking water standard because it applies an incorrect EPA drinking water standard and includes a duplicate sample.

1	(3) TPH in excess of the Puerto Rico EQB screening guideline in samples from two soil borings
2	(MW-208 and MW-211). (See Docket Nos. 150-3; 152-3.)
3	ERM reaches three conclusions of particular interest to the court. First, ERM attributes
4	TPH contamination detected in MW-208 and MW-211, located on the northern end of the
5	property, to a near-surface release of hydrocarbon related to the operation of an on-site
6	mechanical shop. (See Docket No. 150-2 at 30.) Second, ERM informs the Court that benzene
7	contamination in excess of the EPA Drinking Water Standard is localized in two areas of the
8	property. (See Docket No. 150-3 at 28.) One area is centered on MW-102 at the northwest
9	corner of the property. (Id.) The other area is in the vicinity of MW-203 and MW-104, near
10	the diesel UST. (Id.) Third, ERM attributes contamination detected at concentrations below
11	Puerto Rico soil screening guidelines or drinking water standards to sources other than the
12	USTs. <sup>19</sup>

<sup>&</sup>lt;sup>19</sup> See, e.g., TPH detected in soil at MW-203 (at levels below soil screening guidelines) is attributed to near surface releases associated with historical or current operations of petroleum USTs at the location and TPH detected in soil at MW-202 (at levels below soil screening guidelines) is attributed to releases associated with "historical or current operations of petroleum USTs once located south of and adjacent to the location" or hydrocarbon releases from the hydraulic lifts/car wash at the location (*see* Docket No. 150-3 at 31).

Analytical results show MTBE, benzene, ethyl benzene, total lead, and DCE to be present in soil samples, but not at concentrations in excess of applicable soil screening levels. The trace levels of total lead detected in soil (at levels below soil screening guidelines) is attributed to fill material underlying the pavement. (*See id.* at 33.) Benzene and ethyl benzene detected in soil (at levels below soil screening guidelines) is attributed to station activities. (*Id.* at 32.)

Analytical results also show ethyl benzene, toluene, xylene, total dissolved lead, DCE and TCE to be present in groundwater samples, but not at levels in excess of applicable USEPA drinking water standards. ERM informs the court that the concentration of total dissolved lead detected in groundwater is indicative of background levels associated with the leaching of minerals present in naturally-occurring unconsolidated soil. (*See* Docket No. 150-3 at 29.) ERM further informs the court that DCE and TCE in groundwater is likely from "former UIC septic tanks and/or the infiltration of degreaser contaminated car wash rinse water into the hydraulic lift system wastewater collection sumps." (Docket No. 150-3 at 30.)

1	In contrast to the ERM report, the On-Site report offers no opinion as to the probable
2	origin of TPH contamination detected at MW-208 and MW-211 at concentrations in excess of
3	Puerto Rico soil screening guidelines or the origin of contaminants in soil and groundwater
4	detected below applicable standards and screening guidelines.
5	ERM and On-Site estimate groundwater flow at approximately 17 to 21 feet below grade
6	in a north-northeast direction towards the Rio Grande de Loiza, <sup>20</sup> but estimate dramatically
7	different groundwater flow velocities. ERM estimates groundwater velocity to be between
8	.000069 and 1.34 ft/day. In contrast, On-Site estimates groundwater velocity to be between 1.16
9	and 158.4 ft/day. (See Docket No. 152.)
10	Both On-Site and ERM agree that the site assessment should be expanded, but advocate
11	for different approaches. ERM recommends the installation of two off-site monitoring wells
12	down-gradient from wells MW-203 and MW-204 to further delineate the lateral extent of
13	benzene groundwater contamination in the southeast corner of the property. (See Docket
14	No. 150-3 at 29.) ERM does not recommend an expansion of the assessment in a northerly
15	direction because analytical results for groundwater samples collected from wells located down-
16	gradient and cross-gradient from MW-102 do not indicate that benzene contamination exists in
17	those wells. Accordingly, ERM concludes that benzene contamination in the northwest corner

<sup>&</sup>lt;sup>20</sup> ERM and On-Site report different ranges for depth-to-groundwater at the property. ERM indicates that the groundwater table is 18 to 20 feet below grade (*see* Docket No. 150-3 at 16), while On-Site indicates that the groundwater table is 17 to 21 feet below grade (*see* Docket No. 152).

1	of the property near MW-102 "represents the maximum distance that dissolved benzene
2	migrated relative to the direction of groundwater flow and its apparent source area [area around
3	MW-102]." (Docket No. 150-3 at 28.)
4	By contrast, On-Site takes the position that monitoring wells are not suitable for
5	determining the extent of subsurface contamination at the property because soils in the area are
6	not homogenous. Non-homogenous soils would, according to On-Site, create "different paths
7	of less resistance for the contamination in the groundwater to travel in a northerly direction,"
8	toward the Río Grande de Loíza. (Docket No. 152 at 16.) Instead of additional monitoring
9	wells, On-Site recommends using "Electrical Resistivity" and "Seismic Refraction" to
10	determine the extent of contamination that exists, if any, between the station and the Río Grande
11	de Loíza. (See Docket No. 217.) The estimated cost of such a project is between \$200,000 and
12	\$250,000. (See Docket No. 226.) On-Site further recommends that certain facility grease traps
13	and oil/water separators, allegedly constructed by Esso, be removed to prevent the spread of
14	contamination. (See Docket No. 152 at 25.)
15	C. <u>Alleged Deviations from Court-approved Work Plan and QAQC Protocols</u>
16	As an exhibit to its ESA report, the Station submits a "Report on Deviations From Court
17	Approved Laboratory Procedures" (the "Deviations Report") (Docket No. 152-2), authored by
18	the Station's proffered expert, Carlos M. Belgodere-Pamies, P.G. <sup>21</sup> The Deviations Report

<sup>&</sup>lt;sup>21</sup> The court briefly notes Mr Belgodere's relevant qualifications, as detailed in his curriculum vitae. In 1977, he earned a bachelor's degree in environmental sciences with a concentration in geology. He is a

1	alleges that the labs departed from certain quality assurance and quality control ("QAQC")
2	protocols governing the collection and analysis of soil and groundwater, as well as deviations
3	from the court-approved joint work plan. During a status conference on August 5, 2009, the
4	Station's counsel requested an evidentiary hearing to address the alleged deviations. <sup>22</sup> To put
5	the issue to rest, and to ensure that further assessment of the property would be guided by
6	reliable data, we granted the Station's request. (See Docket No. 154.) The evidentiary hearing
7	commenced on September 17, 2009, and ended the same day.
8	II.
8 9	II. <u>Alleged Deviations</u>
9	Alleged Deviations
9 10	<u>Alleged Deviations</u> On behalf of Esso, Mr. Belgodere raises three concerns with the analytical data provided
9 10 11	<u>Alleged Deviations</u> On behalf of Esso, Mr. Belgodere raises three concerns with the analytical data provided by Friedman and three concerns with the analytical data provided by Columbia. With respect

licensed geologist in the Commonwealth of Puerto Rico. In the early 1980s Mr. Belgodere carried out environmental soil investigations with the consulting firms of McClelland Engineers, Inc., Raba Kistner Consultants, Inc., and Terra Vac, Inc. He is a co-founder of the Environmental Support Laboratory, Inc., where he worked between 1988 and 1993 on the development of laboratory procedures to test soils and water for hydrocarbon content and speciation.

<sup>&</sup>lt;sup>22</sup> The Station informs the court that it was unable to communicate with the labs regarding its concerns because "ERM, Esso's representative, had total control of the laboratory analyses and did not allow Dolores Technical Group to query both laboratories regarding reported equipment problems and modifications to the requested analysis procedures." (Docket No. 152 at 2.)

1	Tetraethyl Lead (TEL) in the laboratory control samples were outside of control limits for 8082
2	water analysis, and that the reported concentrations should be considered estimates;"and
3	(3) the quality or lack of TEL calibration chromatograms in the data provided by Friedman.
4	With respect to Columbia, Mr. Belgodere takes issue with (1) the fact that custody seals were
5	apparently torn or missing on four of the eight coolers used to transport soil and groundwater
6	samples to Columbia's laboratory; (2) an alleged failure by Columbia to calibrate its instruments
7	to certain constituents of concern; and (3) toluene contamination in four field blank samples. <sup>23</sup>
8	Based on the issues enumerated above, Mr. Belgodere takes the position in the
9	Deviations Report that the "quality or absence of quality of the laboratory results provided by
10	Esso render the same unusable for the purposes ordered by the Court." (Docket No. 152-1 at
11	14.) At the hearing, Mr. Belgodere recommended on behalf of Esso that all groundwater
12	samples should be collected and analyzed again and that soil contamination should be
13	reassessed through electronic measurement as described earlier in this opinion. (See Docket
14	No. 226 at 48, 88-89.)
15	Having duly considered the arguments presented in Mr. Belgodere's Deviations report
16	and at the hearing, we do not find a sufficient basis at this time to invalidate and render
17	unreliable the analytical data provided by the labs. That said, we support any effort by the

18

Station to conduct an independently-funded environmental assessment of TEL contamination

<sup>&</sup>lt;sup>23</sup> A "field blank" is a sample of analyte-free water that is transferred, at the sampling site, into a container for the purpose of distinguishing ambient contamination from actual sample contribution.

1	on the property provided that (1) Esso and the court are given notice at least ten days prior to
2	any related field activities and (2) Esso or its representatives are given an opportunity to observe
3	field work and collect split samples.
4	III.
5	Esso's Second Motion for Security <sup>24</sup>
6	Esso moves the court for an order requiring Plaintiffs to provide security pursuant to
7	Federal Rule of Civil Procedure 65(c) in the amount of \$400,000. Rule 65(c) provides that
8	"[t]he court may issue a preliminary injunction or a temporary restraining order only if the
9	movant gives security in an amount that the court considers proper to pay the costs and damages
10	sustained by any party found to have been wrongfully enjoined or restrained." Otherwise put,
11	security places a plaintiff on notice of "the maximum extent of its potential liability, since the
12	amount of the bond is the limit of the damages the defendant can obtain for a wrongful
13	injunction, provided the plaintiff was acting in good faith." Global Naps, Inc. v. Verizon
14	New England, Inc., 489 F.3d 13, 21 (citing Continuum Co. v. Incepts, Inc., 873 F.2d 801, 803
15	(5 <sup>th</sup> Cir. 1989)) (internal quotations omitted). A party is deemed to be wrongfully enjoined
16	"when it had a right all along to do what it was enjoined from doing," <i>id.</i> , 489 F.3d at 22, or to

<sup>&</sup>lt;sup>24</sup> On December 5, 2008, we granted Plaintiffs' request for injunctive relief (*see* Docket No. 22), and Esso appealed (*see* Docket No. 47). On January 15, 2009, we denied Esso's motion for the provision of security pursuant to Rule 65(c). (*See* Docket No. 53.) In an opinion dated June 19, 2009, the Court of Appeals vacated, in part, the December 5, 2008, order and remanded with instructions for us to "reconsider Esso's request for a bond based on the requirements of Federal Rule 65(c)." (Docket No. 137.) Pursuant to the First Circuit's order, and with particular consideration of ESA results not previously before us, we now consider "Esso's Second Motion for Security."

not do what the court ordered it to do. Although the provision of security appears mandatory
 under Rule 65(c), the amount of security is "in such sum as the court deems proper." Fed. R.
 Civ. P. 65(c).

4 The Station's basic argument in opposition to Esso's motion is that we should dispense 5 with security all together or only require a nominal bond in light of the overarching public interest at issue in this case – protection of the public welfare and environment. Plaintiffs' 6 7 argument is well-taken, but only in part. Plaintiffs' characterization of this case as "public interest" litigation is on the mark. The public interest at issue here is undeniable. 8 9 Contamination migrating off site and through the groundwater table in the direction of a public 10 waterway is a serious matter of public concern. As recognized by the First Circuit in *Crowley* 11 v. Local No. 82, Furniture & Piano Moving, there is a trend in "public interest" litigation to only 12 require nominal security or to completely dispense with the security requirement. 679 F.2d 978, 13 999-1000 (1<sup>st</sup> Cir. 1982), rev'd on other grounds, 467 U.S. 526 ("Rule 65(c) has spawned essentially two lines of cases . . . . In the second line, no bond is required in suits to enforce 14 important federal rights or public interests."). Plaintiffs, however, misconstrue Crowley to the 15 16 extent they ask us to apply a blanket exception to the security requirement because this case 17 concerns an issue of public interest. That is not the law. There are circumstances that often, but not always, arise in public interest litigation which weigh against imposing a substantial 18 security requirement. It is a case-specific inquiry governed by the three-part test articulated in 19 20 *Crowley*: (1) "the possible loss to the enjoined party together with the hardship that a bond

1	requirement would impose on the applicant"; (2) "the impact that a bond requirement would
2	have on the enforcement of a federal right"; and (3) whether the likelihood of success on the
3	merits of the claims at issue is extraordinarily high, which would weigh against a substantial
4	bond requirement. Id. at 1000.
5	With respect to the first factor, if it is determined that Esso has been wrongfully enjoined
6	in this case, Esso may be damaged in an amount approximating the cost of the assessment. To
7	date, Esso has been invoiced for services rendered by ERM and On-Site in an amount
8	approximating \$300,900 (see Docket Nos. 59-3; 98-2; 98-3; 100-2; 110-2; 129-2; 129-3; 151-2;
9	249), and estimates that an additional \$100,000 "should be sufficient to cover any conceivable
10	additional investigative work" (Docket No. 151 at 5). The Station makes no representation that
11	a bond requirement would pose a significant financial burden or hardship. See, e.g., <u>Westfield</u>
12	High Sch. L.I.F.E. Club v. City of Westfield, 249 F.Supp.2d 98, 128 (D. Mass. 2003) (declining
13	to impose security requirement after finding no evidence of possible loss to the enjoined party
14	and receiving affidavits indicating plaintiff's financial inability to post security); People ex rel.
15	Van De Kamp v. Tahoe Reg'l Planning Agency, 766 F.2d 1319, 1325 (9th Cir. 1985) (affirming
16	decision to not require payment of security by a non-profit environmental group to cover
17	potential property damage after the group indicated that it was unable to pay the requested
18	security). The Station makes no effort to establish that it would be significantly burdened by
19	a security requirement. We, therefore, must conclude that the security requested would not
20	present a significant financial hardship.

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1	With respect to the second factor, as already noted, the Station provides no indication
2	that it is unable to provide the requested security. As such, there is no basis upon which to
3	conclude that a security requirement would foreclose plaintiffs' opportunity to pursue their
4	RCRA claims. See, e.g., Natural Res. Def. Council v. Morton, 337 F.Supp. 167 (D. D.C. 1971),
5	aff'd on other grounds, 458 F.2d 827 (D.C. Cir. 1972) (setting \$100 bond where security
6	requested "would have the effect of denying three nonprofit environmental organizations from
7	obtaining judicial review under NEPA").
8	Lastly, we consider whether there is a substantial likelihood that Plaintiffs will prevail
9	on the merits of their claims. We properly limit the scope of our inquiry here to alleged
10	violations of administrative regulations that require owners and operators of USTs to conduct
11	site investigations, such as the ESA. Rule 605 requires owners and operators to conduct
12	investigations of a release site and the "surrounding area possibly affected" if there is "any
13	evidence that contaminated soils may be in contact with groundwater" in order to determine the
14	"full extent and location of soils contaminated by the release and the presence and
15	concentrations of dissolved product contamination in the groundwater." <sup>25</sup> In 2001, ERTEC
16	collected soil samples at depths between ten and twenty feet below grade that contained
17	concentrations of TPH-DRO as high as 3,290 mg/kg. Given the proximity of these samples to
18	the water table (18 to 20 feet below grade), we find that overwhelming evidence existed in 2001
19	that contaminated soils might be in contact with groundwater. Yet, it is not until now, almost

<sup>&</sup>lt;sup>25</sup>See P.R. Admin. Regulation 4362 (USTR), Rule 605.

1	a decade later, that the full extent and location of groundwater contamination by benzene has
2	come to light. We recognize that, in 2006, Esso conducted an extensive Phase II Evaluation,
3	but that evaluation did not fully determine the extent of benzene contamination in groundwater
4	to the north of the USTs and in the southeast corner of the property or include lead as a
5	constituent of concern. (See Docket No. 22.) It is, therefore, reasonable to conclude that prior
6	to the court-ordered ESA, Esso had not fulfilled its obligation to fully delineate the extent of
7	groundwater and soil contamination on the property and surrounding areas, as is required by
8	Rule 606.
9	In consideration of the record before us at this time, it is unlikely that Esso has been
10	wrongfully enjoined. To the contrary, there is a substantial likelihood that the Station will
11	prevail on a claim that Esso failed to meet the requirements of Rule 606. Having weighed the
12	above Crowley factors, we find it appropriate at this time to impose a security requirement on
12 13	above <i>Crowley</i> factors, we find it appropriate at this time to impose a security requirement on the Station in the amount of \$100,000.
13	the Station in the amount of \$100,000.
13 14	the Station in the amount of \$100,000. IV.
13 14 15	the Station in the amount of \$100,000. IV. <u>Conclusion</u>
13 14 15 16	the Station in the amount of \$100,000. <b>IV.</b> <u>Conclusion</u> For the reasons expressed above, we find at this time that the data generated to date in
13 14 15 16 17	the Station in the amount of \$100,000. <b>IV.</b> For the reasons expressed above, we find at this time that the data generated to date in the parties' court-ordered ESA to be both valid and reliable. The Station's oral motion to

1	The parties are hereby <b>ORDERED</b> to submit to the court a joint proposal and cost
2	estimate for expansion of the ESA in the southeast corner of the property for the purpose of
3	fully delineating the extent of groundwater contamination in that area by not later than
4	March 1, 2010.
5	IT IS SO ORDERED.
6	San Juan, Puerto Rico, this 5 <sup>th</sup> day of February, 2010.
7	s/José Antonio Fusté
8	JOSE ANTONIO FUSTE
9	Chief U.S. District Judge