DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

RCRA Corrective Action
Environmental Indicator (EI) RCRIS Code (CA725)
Current Human Exposures Under Control

Facility Name: Pfizer Pharmaceuticals LLC (PPLLC)
Facility Address: Barceloneta, Puerto Rico
Facility EPA ID#: PRD-090346909

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EIs) are measures being used by the Resource Conservation and Recovery Act (RCRA) Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved) to track changes in the quality of the environment. The two EIs developed to date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no unacceptable human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all contamination subject to RCRA corrective action at or from the identified facility [i.e., site-wide]).

Relationship of EI to Final Remedies

While final remedies remain the long-term objectives of the RCRA Corrective Action program, the EIs are near-term objectives, which are currently being used as program measures for the Government Performance and Results Act of 1993 (GPRA). The "Current Human Exposures Under Control" EI is for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and does not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI determination status codes should remain in the Resource Conservation and Recovery Information System (RCRIS) national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

Facility Information

Pfizer Pharmaceuticals is located on a 90-acre site in Barceloneta, Puerto Rico, within a zone of about 850 acres on which several pharmaceutical plants have been established. The plant site is located near the north-central shore of Puerto Rico in the Barceloneta quadrangle. This site is located along State Road Route 2, km. 58.2 in Barceloneta. The area is surrounded by industrial facilities and agricultural fields.

The nearest residential area is known as Tiburones Community located west of the investigated area. (Ref. 1)

Prior to construction of the pharmaceutical facility, the land now occupied by the facility was owned by the Puerto Rico Land Authority (PPLLC). The land was used for growing pineapples. In 1972, Pfizer began construction of the present manufacturing facility. The Tank Farm was constructed in 1973, and originally consisted of 12 underground storage tanks situated on concrete foundations, backfilled with soil. These tanks were installed to store chemicals used in the manufacturing process. (Ref. 5)

In 1982, Pfizer expanded the tank farm to the north, adding six underground tanks. Pfizer upgraded the Old Tank Farm in 1984. This upgrade included the removal of tanks. The tanks were reinstalled in a concrete containment basin with a sump to collect and remove rainwater, leakage, or spillage from within the containment basin, and backfilled with crushed stone. (Ref. 5)

The following chemicals have been stored at the 104 tank farm. From 1973 to the present: acetone, isopropanol, methanol, toluene, ethyl acetate, tetrahydrofuran, and methylene chloride. From 1981 to 1992: heptane, dimethyl acetamide, dimethyl sulfoxide, and isoamyl alcohol. From 1973 to 1994: xylene. From 1973 to 1979: benzene. From 1973 to the present: ethanol. From 1981 to 1988: chloroform. From 1981 to 1997: hexane. From 1976 to 1980: chlorobenzene. PPLLC records indicate several minor spills associated with pump seals and pump priming have occurred in the tank farm. Reliable data do not exist from the early period of the tank farm use and therefore, the quantity of chemicals spilled prior to the construction of the containment vault (designed to contain chemical spills) is not known (Ref. 2)

Pfizer decommissioned the Old Tank Farm in 1998 and constructed a new above ground tank farm north of SWMU-11. The decommissioning included the removal of the concrete vault and construction of a new above ground tank farm with a raised bottom and new containment construction. Pfizer records indicate several minor spills associated with pump seals and pump priming have occurred in the tank farm. (Ref. 5)

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from solid waste management units (SWMUs), regulated units (RUs), and areas of concern (AOCs)), been **considered** in this EI determination?

   _X_ If yes - check here and continue with #2 below.

   ___ If no - re-evaluate existing data, or

   ___ If data are not available skip to #6 and enter IN (more information needed) status code

Summary of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs):

In August 1988, a RCRA Facility Assessment (RFA) of the Pfizer Barceloneta facility was completed by Versar for the EPA. Following a preliminary review and visual site inspection of the Pfizer facility, no evidence of contaminant release was identified for the following Solid Waste Management Units (Ref. 1):

SWMU 1 – Waste Storage Tank/Fire Protection Tank
SWMU 2 – Waste Storage Tank/Fuel Oil Tank

SWMU 4 – 5,000-Gallon Spent Solvent Tank
SWMU 5 – Evaporator/Incinerator (Removed)
SWMU 6 – Thermal Research & Engineering Co. Liquid Waste Incinerator (Removed)
SWMU 7 – Solid Waste Incinerator (Removed)
SWMU 8 – Rotary Kiln Incinerator
SWMU 9 – Three 38,000-Gallon Waste Equalization & Neutralization Tanks
SWMU 10 – Drum Storage Area

Based on the RFA, EPA determined that a RFI was warranted for SWMU 3 and 11.

SWMU 3 – 47,000-Gallon Waste Storage Tank (Removed)

The following conclusions were given on the assessment of SWMU 3:
"The ditch next to the previous location of the 47,000-Gallon Tank revealed volatile organics indicative of gasoline contamination. Phthalates were observed in the samples from the ditch. Due to the inconsistent findings of the laboratories, the values were attributed to sample contamination." (Ref. 1)
EPA required that, if phthalate concentrations at SWMU 11 were determined to be above the recommended action levels, then a RCRA facility investigation would also be required for SWMU 3. Since phthalate levels did not exceed RCRA action levels, no investigations were performed for SWMU-3. (Ref. 1 and 5)

SWMU 11 – Solvent Recovery Facilities

This SWMU has been defined as the solvent tank farm, the area north of the tank farm and the area east of the tank farm by the former location of the phenol oven. From 1991 to 1994, Pfizer conducted RFIs of SWMU-11. The findings of the RFI indicated that there has been a release of volatile organic compounds (VOCs) to the subsurface soils. Subsequent volatilization of these compounds has lead to elevated VOC concentrations in the vapors of the subsurface pore spaces (Ref. 1 and 3)

References:

1. RCRA Facility Investigation Work Plan. Prepared by Alliance Technologies Corporation. May 1991.
2. Groundwater RCRA Facility Investigation Data Report. Prepared by TRC Environmental Corporation. December 2003.
3. RCRA Facility Investigation Draft Supplemental Work Plan. Prepared by TRC Environmental Corporation. February 2006.
4. Soil Vapor Monitoring Results, Volume 1 Report. Prepared by TRC Environmental Corporation. July 2006.
5. Draft RCRA Facility Investigation Supplemental Report, Volume 1: Text, Tables, Figures. Prepared by TRC Environmental Corporation. June 2007.
6. Draft RCRA Facility Investigation Supplemental Report, Volume 2: Appendices. March 2007.
7. Teleconference between EPA Region 2, TechLaw, and Pfizer re: Status of PFIZER Facility Relative to the CA725 EI Determination. September 20, 2007.

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be "**contaminated**"[1] above appropriately protective risk-based levels (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

Media	Yes	No	?	Rationale/Key Contaminants
Groundwater	X			Chlorobenzene, Chloroform, and Benzene
Air (indoors)[2]	--	--	--	See discussion under Question 3.
Surface Soil (e.g., <2 ft)		X		See discussion below.
Surface Water	--	--	--	Not sampled. See discussion below.
Sediment	--	--	--	Not sampled. See discussion below.
Subsurface Soil (e.g., >2 ft)	X			See discussion below.
Air (Outdoor)	--	--	--	Not sampled

___ If no (for all media) - skip to #6, and enter YE, status code after providing or citing appropriate levels, and referencing sufficient supporting documentation demonstrating that these levels are not exceeded.

__X__ If yes (for any media) - continue after identifying key contaminants in each contaminated medium, citing appropriate levels (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

___ If unknown (for any media) - skip to #6 and enter IN status code.

Rationale:

A RCRA Facility Investigation (RFI) is being performed at the facility according to an EPA approved May 1991 RFI Work Plan and supplemental Work Plans. An initial baseline assessment of risk to human health at the facility has also been completed. (Ref. 5).

Groundwater

Groundwater monitoring well MW-1 is located north of the former tank farm at SWMU 11. Wells MW-3 and MW-4 were placed at the interpreted upgradient boundary of the Pfizer property to evaluate if there is a possible off-site chlorobenzene source. Wells MW-5 and MW-6 were positioned downgradient of

[1] "Contamination" and "contaminated" describe media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

[2] Recent evidence (from the Colorado Department of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

SWMU 11 to evaluate whether the chlorobenzene detected in wells MW-1 and MW-2 might be migrating off site from the facility. Refer to Figure 2.1-1 in Attachment 1. (Ref. 5)

Groundwater samples collected on January 10, 2007, indicated concentrations of chlorobenzene were above the Safe Drinking Water Action (SDWA) MCL (100 ug/L). Concentrations of chlorobenzene were 450 µg/L, 76 µg/L, 25 µg/L at wells MW-1, MW-2, and MW-6, respectively. Groundwater concentrations of chlorobenzene increased slightly in well MW-2 since the October 10, 2006 sampling event. (Ref. 5) A summary of the groundwater sampling results compared to the current MCL for benzene and chlorobenzene for wells MW-1 and MW-2 are presented below. (Ref. 5)

MW-1							
Compound	MCL (µg/L)	02/26/03	06/03/03	07/15/03	01/21/05	10/10/06	1/11/07
Benzene	5	3 U	3 U	3 U	0.46	5 U	5 U
Chlorobenzene	100	146 J	33.2	67.7	197	370	450
Chloroform	none	8	17.1	13.9	1 U	8.5	11 U

MW-2							
Compound	MCL (µg/L)	02/26/03	06/03/03	07/15/03	01/21/05	10/10/06	1/11/07
Benzene	5	1	1.3 J	1.5 J	0.9	5	5
Chlorobenzene	100	177	239	216	89.5	63	76
Chloroform	none	3 UJ	3 U	3 U	1 U	5 U	5 U

U – Compound not detected at concentration listed.
J – Estimated concentration.

Data from the June 2007 Draft RFI Supplemental Report documents detections of chlorobenzene (450 ppb) at MW-1. The source of the chlorobenzene contamination has not been resolved. No new information to attribute the chlorobenzene plume to a source has been provided in the June 2007 RFI Report. It is recommended that the source of contamination be further addressed. In addition, groundwater concentrations of chlorobenzene increased slightly at monitoring well MW-2 since the October 10, 2006 sampling event. The chlorobenzene contamination has not been clearly defined and has not stabilized.

A well inventory conducted in November 2004 determined that there are approximately 16 groundwater wells in the area, including two wells located on the Pfizer facility. One well is installed in the Aymamon water table aquifer, at a depth of approximately 500 feet deep. The depth to groundwater is approximately 200 feet. The second well is installed in the deeper confined aquifer and is open over an interval of from 1322 to 1390 feet. The hydraulic conductivity of the upper Aymamon formation is approximately 0.015 cm/s and the effective porosity is approximately 0.30. Groundwater flow is interpreted to be directed to the north with a hydraulic gradient of approximately 1 foot per 200 feet. (Ref. 5)

Surface/Subsurface Soil

In 1991 through 1993, and 2000, soil samples were collected from 32 soil sampling locations at various surface and subsurface depths beneath the former tank farm containment vault. During the March 2000 sampling event, soil samples were collected at various depths at 10 locations. Seven VOCs were observed to be present at concentrations above their respective detection limits, including methylene

chloride, acetone, toluene, benzene, ethylbenzene, xylenes (total) and tetrahydrofuran. Sampling depths ranged from 1 – 2 feet below ground surface (bgs) to 13 – 15 feet bgs. No soil samples contained VOC concentrations in excess of RCRA Region III Residential Risk Based Concentrations (RBCs) and site-specific EPA Soil Screening Levels (SSL) developed for the site based on a dilution attenuation factor of 24,700. Neither EPA Region III RBCs nor the site-specific SSLs are available for 2-butanone, 2-hexanone, and pentanol. (Ref. 2)

Soil Vapor

Pfizer has conducted annual vapor sampling at the former tank farm area since February 1992. The latest sampling program was conducted June 7, 2006 through June 20, 2006 from 23 soil vapor-monitoring wells. No site related contaminants were noted in three wells: AB-1, AB-12, and VB-15a. At least one site related compound (excluding methane) was detected in six wells: AB-2 (chlorobenzene=5.6ppm); AB-5 (chlorobenzene=5.7ppm); AB-8 (tetrahydrofuran=30ppm); AB-9 (benzene=19ppm); VB-13 (chloroform=18ppm); and AB-28 (chloroform=12ppm). Methane concentrations exceed 1000ppm in ten wells AB-10, AB-10b, AB-16, AB-19, AB-23, B-1, B-4, B-6 and B-8. The July 2006 Soil Vapor Monitoring Results indicates the presence of methane appears to be from biodegradation of subsurface contaminants. (Ref. 4) Refer to the attached Figure 1-1 for the location of the soil vapor monitoring wells. (Ref. 4 and 6)

Surface Water/Sediment

The facility is located on a relatively flat area (approximately 80 feet above sea level) above the flood plain of the Manati River. The Manati River is the nearest body of water to Pfizer, located about 3 miles east of the facility. No known surface water sampling has been conducted at the Manati River. The Atlantic Ocean is to the north approximately 4 miles from the facility. There have been no documented impacts to surface water or sediment as a result of activities conducted at the site. (Ref. 3)

All surface water runoff at the facility is discharged into five UIC permitted sinkholes on the property. The Tank Farm area drains into sinkhole, UIF-002, located in north east of the site. During a normal rain event, approximately 37,500 gallons per day of water drains into the sinkhole. The rain water which enters the tank farm vault is pumped into the on-site water treatment plant then discharged to the Barceloneta public treatment plan. Approximately 95% of the site is paved and infiltration is estimated to be no more than 7 inches per year or 6,500 gallons per day. (Ref. 3)

Air (Outdoors)

No assessment of impacts to outdoor air have been documented at the Pfizer facility.

References:

1. RCRA Facility Investigation Work Plan. Prepared by Alliance Technologies Corporation. May 1991.
2. Groundwater RCRA Facility Investigation Data Report. Prepared by TRC Environmental Corporation. December 2003.
3. RCRA Facility Investigation Draft Supplemental Work Plan. Prepared by TRC Environmental Corporation. February 2006.
4. Soil Vapor Monitoring Results, Volume 1 Report. Prepared by TRC Environmental Corporation. July 2006.
5. Draft RCRA Facility Investigation Supplemental Report, Volume 1: Text, Tables, Figures. Prepared by TRC Environmental Corporation. June 2007.

6. Draft RCRA Facility Investigation Supplemental Report, Volume 2: Appendices. March 2007.
7. Teleconference between EPA Region 2, TechLaw, and Pfizer re: Status of PFIZER Facility Relative to the CA725 EI Determination. September 20, 2007.

3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table
*Potential **Human Receptors** (Under Current Conditions)*

"Contaminated" Media	Residents	Workers	Day-Care	Construction	Trespasser	Recreation	Food[3]
Groundwater	No	No	No	No	No	No	No
Air (indoor)	No	Yes	No	No	No	No	No
Surface Soil (e.g. < 2 ft)	No	Yes	No	Yes	No	No	No
~~Surface Water~~	–	–	–	–	–	–	–
~~Sediment~~	–	–	–	–	–	–	–
Subsurface Soil (e.g., > 2 ft)	No	Yes	–	Yes	No	No	No
~~Air (outdoors)~~	–	–	–	–	–	–	–

Instruction for Summary Exposure Pathway Evaluation Table :

1. Strike-out specific Media including Human Receptors' spaces for Media which are not "contaminated" as identified in #2 above.

2. Enter "yes" or "no" for potential "completeness" under each "Contaminated" Media — Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (Pathways) do not have checked spaces. These spaces instead have dashes ("--"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

___ If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter "YE" status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

__X__ If yes (pathways are complete for any "Contaminated" Media - Human Receptor combination) - continue after providing supporting explanation.

___ If unknown (for any "Contaminated" Media - Human Receptor combination) - skip to #6 and enter "IN" status code

[3] Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish)

Rationale :

The Pfizer site is currently utilized for industrial purposes only, thus no residents or day-care receptors are exposed to on-site contamination. Current and anticipated use includes construction/excavation and industrial/commercial. Should the property ever be sold, the property would be deed restricted for industrial/commercial use only. It is assumed that subsurface soils would be brought to the surface during construction/excavation activities, and thus be available for contact. (Ref. 5)

Groundwater

Groundwater is at a depth exceeding 250 feet and is not available for contact. Therefore, there is no completed pathway for worker exposure. (Ref. 5)

Air (Indoors)

Well MW-1, located within SWMU-11, produced a maximum chlorobenzene concentration of 450 ppb. This value exceeds the SWDA MCL of 100 ppb; however, there is no direct contact with groundwater at the site. The USEPA Draft Vapor Intrusion Guidance (2002) presents a groundwater screening concentration of 390 ppb (ug/L), based on the target indoor air concentration (at a hazard quotient of 1). This value is marginally exceeded by the maximum detected concentration in groundwater of 450 ppb, indicating the potential for human health impact. However, several additional factors tend to minimize the potential for adverse breathing zone exposures, in spite of the underlying karst geology/potential for preferential vapor migration pathways: 1) Groundwater is in excess of 250 feet below ground surface (bgs); 2) A clay horizon (lessened degree of vapor permeability) overlies the bedrock from a thickness of a few feet to over 100 feet; and, 3) The target indoor air concentration upon which the groundwater screening concentration based on vapor intrusion potential is 61 $\mu g/m^3$. This latter value is compared to the existing OSHA PEL for chlorobenzene of 350,000 $\mu g/m^3$, a greater than 5,700-fold difference. Therefore, USEPA Region 2 has reached the conclusion that no impact to indoor air quality in surface structures is likely. (Ref. 7)

Surface/Subsurface Soil

Exposure to contaminated subsurface soil may occur during intrusive activities. As discussed in the response to Question 2, VOCs have not exceeded Region III Residential RBCs. Therefore, the risk to on-site industrial workers and construction workers from exposure to contaminants in the surface and subsurface soil is not anticipated to be of significance. (Ref. 5)

All individuals conducting intrusive activities conducted at the Pfizer Facility must develop a site specific Health and Safety Plan (HASP). This HASP allows for the protection of construction workers through the adherence to applicable health based levels and institutional controls (e.g., PPE use). (Ref. 3)

References:

1. RCRA Facility Investigation Work Plan. Prepared by Alliance Technologies Corporation. May 1991.
2. Groundwater RCRA Facility Investigation Data Report. Prepared by TRC Environmental Corporation. December 2003.
3. RCRA Facility Investigation Draft Supplemental Work Plan. Prepared by TRC Environmental Corporation. February 2006.

4. Soil Vapor Monitoring Results, Volume 1 Report. Prepared by TRC Environmental Corporation. July 2006.
5. Draft RCRA Facility Investigation Supplemental Report, Volume 1: Text, Tables, Figures. Prepared by TRC Environmental Corporation. June 2007.
6. Draft RCRA Facility Investigation Supplemental Report, Volume 2: Appendices. March 2007.
7. Teleconference between EPA Region 2, TechLaw, and Pfizer re: Status of PFIZER Facility Relative to the CA725 EI Determination. September 20, 2007.

4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **significant**[4] (i.e., potentially "unacceptable") because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks?

__X__ If no (exposures cannot be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

____ If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

___ If unknown (for any complete pathway) - skip to #6 and enter "IN" status code.

Rationale:

As mentioned in Question 3, the Pfizer site is currently utilized for industrial purposes only, thus no residents or day-care receptors are exposed to on-site contamination. Current site use includes construction/excavation and industrial/commercial. Refer to Question 3. (Ref. 5)

References:

1. RCRA Facility Investigation Work Plan. Prepared by Alliance Technologies Corporation. May 1991.
2. Groundwater RCRA Facility Investigation Data Report. Prepared by TRC Environmental Corporation. December 2003.
3. RCRA Facility Investigation Draft Supplemental Work Plan. Prepared by TRC Environmental Corporation. February 2006.
4. Soil Vapor Monitoring Results, Volume 1 Report. Prepared by TRC Environmental Corporation. July 2006.

[4] If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a Human Health Risk Assessment specialist with appropriate education, training, and experience.

5. Draft RCRA Facility Investigation Supplemental Report, Volume 1: Text, Tables, Figures. Prepared by TRC Environmental Corporation. June 2007.
6. Draft RCRA Facility Investigation Supplemental Report, Volume 2: Appendices. March 2007.
7. Teleconference between EPA Region 2, TechLaw, and Pfizer re: Status of PFIZER Facility Relative to the CA725 EI Determination. September 20, 2007.

5. Can the "significant" **exposures** (identified in #4) be shown to be within acceptable limits?

____ If yes (all "significant" exposures have been shown to be within acceptable limits) - continue and enter "YE" after summarizing and referencing documentation justifying why all "significant" exposures to "contamination" are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

____ If no (there are current exposures that can be reasonably expected to be "unacceptable") - continue and enter "NO" status code after providing a description of each potentially "unacceptable" exposure.

____ If unknown (for any potentially "unacceptable" exposure) - continue and enter "IN" status code.

Rationale :

Not Applicable

6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

_X_ YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the Pfizer site, EPA ID# PRD-090346909, located at in Barceloneta, Puerto Rico, under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

____ NO - "Current Human Exposures" are NOT "Under Control."

____ IN - More information is needed to make a determination.

Completed by: Layla Hani Date: 09/27/2007
Layla Hani
Staff Consultant
TechLaw, Inc.

Reviewed by: Cathy Dare Date: 09/27/2007
Cathy Dare
Staff Consultant
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Also reviewed by: Luis A. Negron Date: 9/28/2007
Luis Negron, Project Manager
RCRA Programs Branch
EPA Region 2

Date: 9/28/2007
Ariel Iglesias-Portalatin, Branch Chief
Response & Remediation Branch/CEPD
EPA Region 2

Approved by: Date: 9-28-07
Carl Axel P Soderberg, Division Director
Caribbean Environmental Protection Division
EPA Region 2

Locations where references may be found:

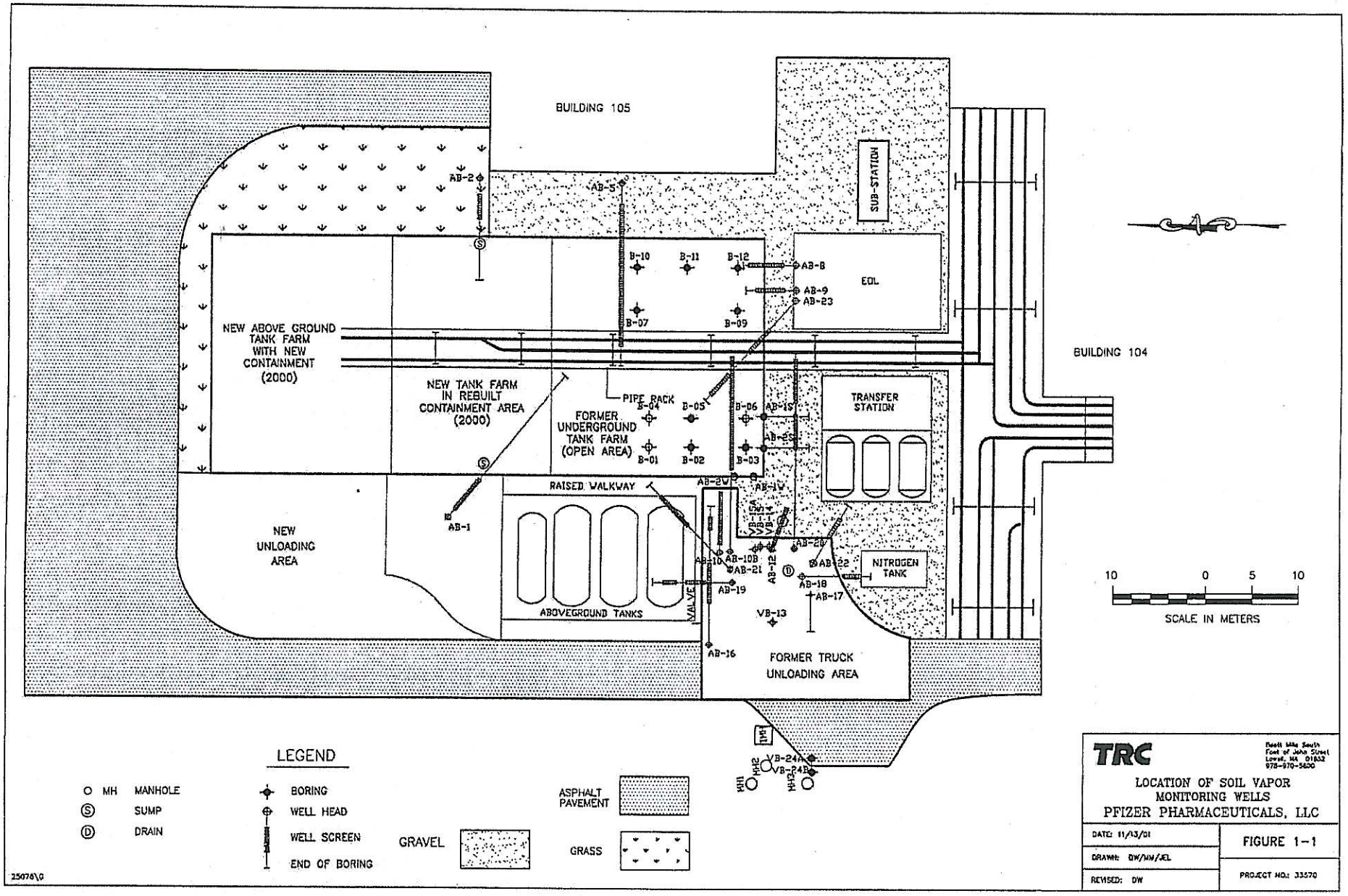
References reviewed to prepare this EI determination are identified after each response. Reference materials are available at U.S. EPA, Region 2.

Contact telephone and e-mail numbers: Luis Negron
787-977-5855
Luis.Negron@epa.gov

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

Attachments

Figure 1-1: Location of Soil Vapor Monitoring Wells
Figure 2.1-1: Ground Water Monitoring Well Locations



TRC

Rosett Mills South
Foot of John Street
Lowell, MA 01852
978-970-5600

LOCATION OF SOIL VAPOR MONITORING WELLS
PFIZER PHARMACEUTICALS, LLC

DATE: 11/13/01	FIGURE 1-1
DRAWN: DW/MM/JEL	
REVISED: DW	PROJECT NO.: 33570

25076\G

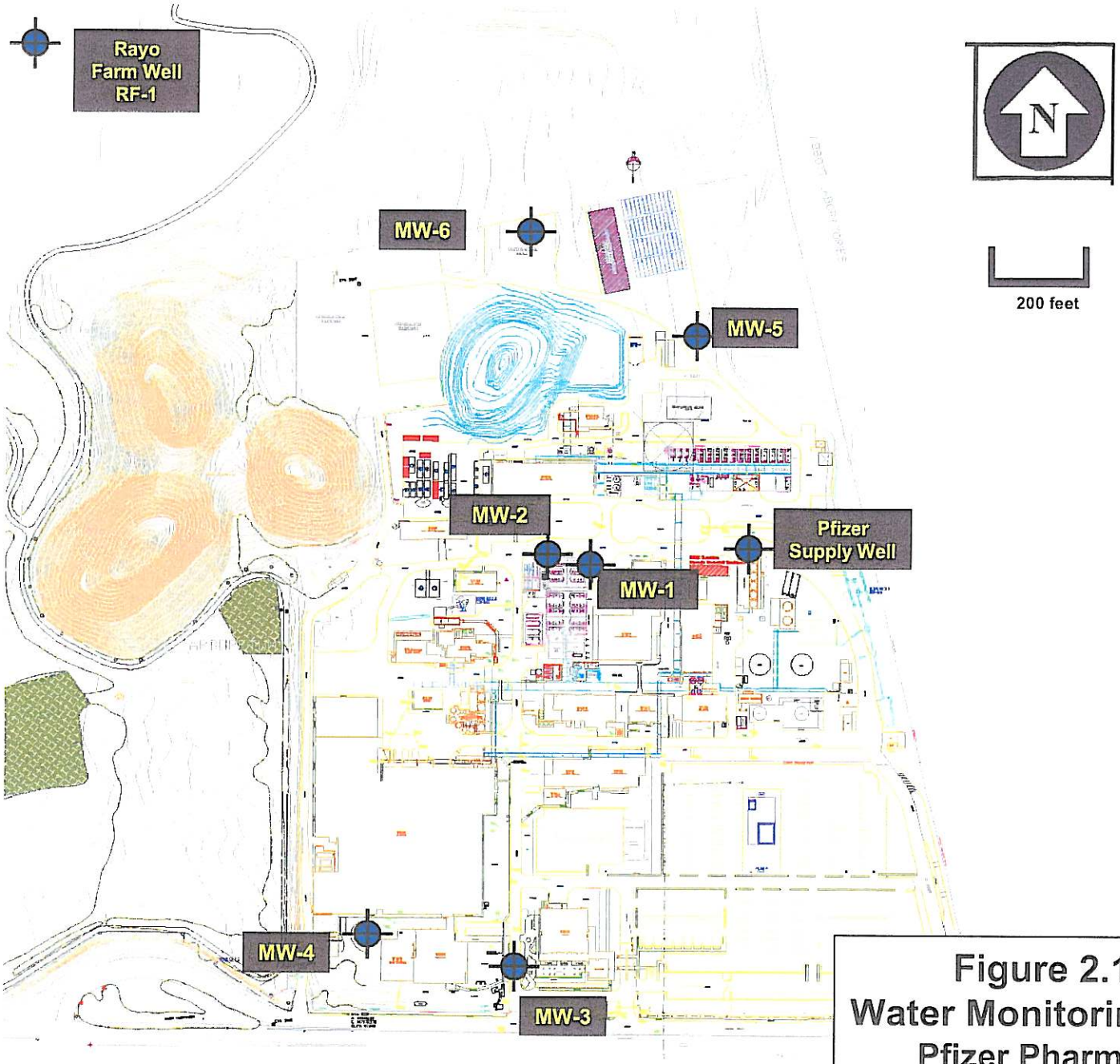


Figure 2.1-1: Ground Water Monitoring Well Locations
Pfizer Pharmaceuticals, LLC
Barceloneta, PR