DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA725)

Current Human Exposures Under Control

Facility Name: Fairchild Republic Co.
Facility Address: East Farmingdale, NY 11735
Facility EPA ID #: NYD079818555

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 (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination? **(Note: This determination addresses contaminated media regulated under New York State's Inactive Hazardous Waste Disposal Site Remedial Program.)**

   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 check the "IN" status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the 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 EI 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 objective of the RCRA Corrective Action program the EI 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 are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do 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 Determinations status codes should remain in 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).

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)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater	x			(see below)
Air (indoors)[2]		x		
Surface Soil (e.g., <2 ft)		x		
Surface Water		x		
Sediment		x		
Subsurf. Soil (e.g., >2 ft)	x			(see below)
Air (outdoors)		x		

___ 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 and Reference(s):

Background

The Fairchild Republic Main Plant Site is part of a former facility of approximately 88 acres in East Farmingdale, Suffolk County, New York (Fig. 1). The Main Plant Site is located on the east side of Route 110 and is bounded by the Long Island Railroad (LIRR) to the north; New Highway to the east; and Republic Airport to the south. There are 0.53 acres in the southeast portion of the Fairchild property that represents the current boundary of the Fairchild Republic Main Plant Inactive Hazardous Waste Disposal Site.

Fairchild manufactured aircraft and related parts from 1931 to 1987. The Fairchild facility property in East Farmingdale consists of

[1] "Contamination" and "contaminated" describes 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 Dept. 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.

two parcels. One parcel is located south of Conklin Street and contains the 0.53 acre NYSDEC listed site. This parcel was first used as a runway in 1927. Seversky Aircraft operated at the site from 1931 to 1939. Republic Aviation Corporation purchased Seversky Aircraft in 1939. Numerous manufacturing buildings were built or expanded in the 1940's. Fairchild Industries, Inc. took possession of the property in 1965 when it acquired assets of Republic Aviation Corporation. The remainder of the facility is north of Conklin Street. The Ranger Aircraft Engine Corporation purchased the property in 1927 and constructed manufacturing and test facilities for aircraft engines. Republic Aviation Corporation purchased the property in 1955 and used the existing facilities for research and development and office space. The Farmingdale Company owned the property from 1965 to 1972. Fairchild Industries purchased the property in 1972 and used it as warehouse and office space until closing in 1987. This parcel was removed from the original listing of the Main Plant Inactive Hazardous Waste Disposal Site after previous facility investigations showed no contamination was present.

The Fairchild Republic Main Plant closure plan was submitted to the NYSDEC in 1987 under the Resource Conservation and Recovery Act (RCRA) requirements. The approved plan was implemented from 1987 through 1988. The site closure included the removal of hazardous materials, residues, and all above and underground storage tanks, except four 15,000 gallon fuel oil tanks, which were removed in 1992.

Fairchild Republic Main Plant manufacturing operations did not change significantly from the mid-1940s to 1987. Building 17 (demolished in 1997) was the primary manufacturing area with processes including chemical milling, alodining, anodizing, vapor degreasing, titanium descaling, and cadmium plating. Process chemicals used in this area included nitric acid, chromic acid, sulfuric acid, sodium hydroxide, toluene, tetrachloroethylene (PCE), trichloroethylene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and nitric/hydrofluoric acid solutions. PCE, TCE, and 1,1,1-TCA were also used in other areas of the Main Plant.

PCE was substituted for toluene as a coatings vehicle to conform with air pollution regulations beginning in 1975. Years later, the piping from the PCE tank was found to be leaking, creating a source of PCE soil and groundwater contamination. The TCE soil and groundwater contamination came from the vapor degreaser operations, from TCE that occurs in non-reagent grade PCE, and as a breakdown product of PCE.

The Main Plant industrial water supply was always obtained from groundwater wells. The average pumping rate listed in the RI Report was estimated at 1.7 million gallons per day. Non-contact industrial and air conditioning cooling water, treated wastewater, and stormwater were discharged through the storm sewer to the Old Recharge Basin located west of the site beginning in the early 1940s.

The Old Recharge Basin, located west of Route 110, historically introduced low level volatile organic compound (VOC) contamination to the

groundwater beneath Republic Airport. This low level groundwater plume has commingled with higher concentration contamination from an unknown upgradient VOC source. The Remedial Investigation for the Old Recharge Basin (ORB) showed that the ORB is no longer a source of groundwater contamination. A Record of Decision was signed for the ORB in June 1996 and included institutional controls (deed restriction, fencing, warning signs, and maintenance) to prevent contact with contaminated soils, surface water, and sediments on-site.

Fairchild Republic constructed a wastewater treatment plant at the Main Plant in 1950 to reduce hexavalent chromium to trivalent chromium and to precipitate metal hydroxides in wastewater from the chemical milling, alodine process, anodizing, spotweld wash, and paint shop operations. The plant was located adjacent to the south wall of Building 17. Wastewater was treated in batches from 1950 to 1963. The treatment plant was upgraded in 1963 to handle continuous waste streams and again in 1986 to meet publicly owned treatment works pretreatment standards. The treatment plant effluent was diverted to the NYSDOT sewage treatment plant located on the Republic Airport property in 1981. In 1986, the treatment plant was connected to the Suffolk County Publicly Owned Treatment Works. Shortly thereafter in 1987 Fairchild Republic ceased manufacturing operations at the Main Plant.

Fairchild connected several homes that had private wells to public water that were identified within an area between Route 110 and Great Neck Road, Wellwood Avenue and Sunrise Highway. All private wells identified in this area of concern that are being used as a source of drinking water have been offered the opportunity to connect to the Suffolk County Water Authority (SCWA) public water supply at no cost to the homeowner by the 1996 Record of Decision. Two of these homeowners have refused to be connected and their cases referred to the Suffolk County Health Department.

Two abandoned 550 gallon underground storage tanks were discovered and removed during the excavation of site soils in February 1998. Both underground storage tanks were found within the boundaries of the inactive hazardous waste site. One of the recently discovered tanks was next to the vapor degreaser. Based on the analytical results from sludge samples, the leaking tank was used to store trichloroethene. The tank location was within the zone of influence of the soil vapor extraction system. The second 550 gallon tank also contained a sludge material. The analysis showed the contents to be waste paint.

Previous Investigations

Numerous site wide investigations have been performed prior to and in conjunction with the RI/FS consent order. The following is a partial list of reports on file that detail the findings of those investigations:

Report Title	Date
Phase 2 Hydrogeological Investigation and Report	1987
Supplemental Phase 2 Report	1990
Summary of Environmental Investigations Report	1992
Old Recharge Basin Remedial Investigation Report	1995
Main Plant Site Remedial Investigation Report	1997
Main Plant Site Additional Sampling Report	1997

The purpose of the Main Plant Site Remedial Investigation (RI) was to define the nature and extent of any contamination resulting from previous activities at the site. The RI was conducted in two phases. The first phase was conducted between August 1992 and January 1993 and the second phase between September 1993 and February 1994. A report entitled “Fairchild Industries, Inc. Main Plant Site Remedial Investigation Report” (May 1997) describes the field activities and findings of the RI in detail. Data from previous investigations and additional sampling efforts in 1996 and 1997 for Old Recharge Basin fill materials were also compiled in the Main Plant Site RI Report. The RI included the installation of monitoring wells and soil borings, chemical analysis of soil and groundwater samples, soil gas surveys for volatile organic compounds, characterization of groundwater hydrogeologic conditions and physical properties of site soils, and additional site sampling for soils to be used in filling the Old Recharge Basin.

To determine which media (soil, groundwater, etc.) contain contamination at levels of concern, the RI analytical data was compared to environmental Standards, Criteria, and Guidance values (SCGs). Groundwater, drinking water, and surface water SCGs identified for the Main Plant Site were based on NYSDEC Ambient Water Quality Standards and Guidance Values and 10 NYCRR Part 5 of NYS Sanitary Code. NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Soil Cleanup Guidelines for the Protection of Groundwater, background conditions, and risk-based remediation criteria were used as SCGs for soils.

As described in the RI Report, many soil, groundwater and soil gas samples were collected at the Site to characterize the nature and extent of contamination. These samples were analyzed for volatile and semi-volatile organic compounds, pesticides, polychlorinated biphenyls (PCBs) and inorganics (metals). Overall, chlorinated volatile organic compounds (VOCs), mainly trichloroethylene (TCE) and perchlorothylene (PCE) are the contaminants of concern for this site. Discrete areas of site soils also contained chromium above NYSDEC TAGM 4046 guidelines but below hazardous levels of concern as substantiated by the Toxicity Characteristic Leaching Procedure (TCLP).

Soil and Soil Gas

The most significant manufacturing and process areas were located in Building 17. The alodine and chemical milling tanks, vapor degreaser, and PCE and TCA tanks were located along the southern wall. It is this area that comprises most of the currently listed 0.53 acre site. The soils beneath the slab and adjacent to Building 17 were found to be contaminated with VOCs; mainly TCE and PCE. The alodine and chemical milling areas under Building 17 and sulfuric anodizing area under Building 42 also contained levels of chromium above NYSDEC TAGM 4046 soil values.

The highest soil gas concentrations were found near the former PCE tank and near the vapor degreaser area beneath Building 17. These concentrations ranged from non-detect (ND) to 1,300 ppmv for TCE, ND to 23,000 ppmv for PCE, ND to 690 ppmv for dichloroethylene (DCE, cis & trans), ND to 61 ppmv for trichloroethane (TCA) and ND to 0.016 ppmv for vinyl chloride. Soil gas data was used to delineate hot spots in soil and to guide subsequent soil sampling efforts. Post-remediation soil sampling results (MPS Additional Sampling Report, October 1997) and monthly SVE monitoring date submitted by Fairchild indicate that the source zone has been cleaned up.

Comparative soil sample results ranged from ND to 4.4 ppm for TCE, ND to 4 ppm for PCE, ND to 0.14 ppm for DCE, ND to 0.013 ppm for TCA and 2.6 to 791 ppm for chromium. Most detectable results for soils were below NYSDEC TAGM 4046 soil cleanup values of 0.7 ppm for TCE, 1.4 ppm for PCE, 0.4 ppm for DCE, 0.8 ppm for TCA and 50 ppm for chromium. The chromium contaminated soils did not fail TCLP and have been excavated and removed from the Site.

Groundwater

The direction of groundwater for both the shallow and deep zone is to the south-southeast. The RI determined that Building 17 was a significant source area for VOC groundwater contamination. There is an extensive PCE plume that is well defined emanating from the area of the former PCE tank there. This plume is moving south-southeast beneath the runways of Republic Airport. In the area of the Site, the glacial aquifer flow in the horizontal direction is about 1.5 feet/day.

No information exists on the duration of TCE use or discharges at the Site. The vapor degreaser is a source of contamination of TCE. However, the TCE plume is not as well defined as the PCE plume for the following reasons: (1) the former high volume groundwater production wells and the new recharge basins on the Site may have affected the offsite migration of the plume, especially in the glacial aquifer; and (2) off-site sources of TCE, including the Old Recharge Basin (ORB), may have impacted the western portion of the groundwater plume beneath Republic Airport. Although the downgradient extent of the VOC plume has never been fully established, recent data obtained during the pre-design

investigation (Remedial Design Data, August 1999) indicates that it does not extend into residential areas south of Republic Airport.

Under former Building 17, there is no clay layer separating the glacial and Magothy aquifers. However, there is an unnamed clay layer separating the upper Magothy from the lower Magothy. Elevated levels of PCE have migrated downward through the glacial aquifer toward the top of this clay layer separating the upper and lower portions of the Magothy aquifer. The RI soil borings indicate this clay layer is continuous throughout the area of concern. Deep aquifer testing below this clay formation found no VOCs and indicated that this clay layer has restricted downward migration and enhanced lateral migration of contaminated groundwater flow.

A limited sampling of groundwater wells was conducted in February 1997. The data revealed that the shallow and deep VOC groundwater contamination beneath the Site had dropped significantly and moved downgradient. For example MW-19D, located just downgradient of the Building 17 source areas, decreased from 3,600 ppb PCE to 142 ppb of PCE.

Some benzene, toluene, ethylbenzene and xylene (BTEX) was found in upgradient MW-3 from an offsite spill that has since been remediated. The February 1997 sampling round that included MW-3, found BTEX reductions to just above SCGs. The groundwater analytical data was also reviewed for inorganic SCG exceedences; including chromium. The groundwater analytical results indicate that the Site is not a source of inorganic contamination to groundwater.

Historic low level VOC groundwater contamination from the ORB can also be found on the southwestern side of Republic Airport. The majority of this plume is TCE and has commingled with the plume of a much higher level of TCE from an unidentified upgradient source. It has been more than 15 years since Fairchild discharged into the recharge basin. More recent RI data shows the ORB is no longer a source of VOC groundwater contamination (ORB Remedial Investigation Report, September 1995).

Groundwater concentrations exceeded the standard for TCE in 68 out of 160 samples collected during the RI. The maximum TCE concentration was 1,659 ppb. For PCE, the standard was exceeded in 39 out of 160 samples and the maximum PCE concentration was 5,100 ppb. For vinyl chloride, the standard was exceeded in 26 out of 160 samples. The maximum vinyl chloride concentration was 200 ppb. These groundwater concentrations were found downgradient and represent a significant exceedence of SCGs in the glacial and Magothy aquifers. The NYS groundwater standard is 5 ppb for TCE, PCE and DCE and 2 ppb for vinyl chloride.

Indoor Air

Based on previous soil gas survey results (Main Plant Site RI Report, May 1997), the subsequent demolition of Building 17 and all other original Fairchild buildings, and the removal of contaminant source areas, there are currently no on-site indoor air problems. Although some

vaporization of dissolved volatile contaminants in groundwater beneath off-site structures may be occurring, potential indoor air problems associated with such a mechanism is not seen as a significant health risk due to the depth at which contaminated groundwater occurs and the presence of an impermeable clay unit above the contamination.

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	Trespassers	Recreation	Food[3]
Groundwater	no	no	no	no			no
~~Air (indoors)~~	___	___	___				
~~Soil (surface; <2 ft)~~	___	___	___	___	___	___	___
~~Surface Water~~	___	___			___	___	___
~~Sediment~~	___	___			___	___	___
Soil (subsurface, >2 ft)				no			no
~~Air (outdoors)~~	___	___	___	___	___		

Instructions 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 check spaces ("___"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

X 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).

___ 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 and Reference(s):

Summary of Human Exposure Pathways

The potential exposure pathway of concern at the Site is ingestion of contaminated groundwater. During the RI, volatile organic compounds were detected in on-site and off-site groundwater monitoring wells at concentrations significantly above drinking water standards. There are three public drinking water supply wellfields located downgradient from the Fairchild site. These include: the East Farmingdale Water District Route 109 Wellfield, and the Suffolk County Water Authority Albany Avenue and Tenety Avenue Wellfields. The Great Neck Road Wellfield is located side-gradient relative to the plume. Two additional Suffolk County Water Authority Wellfields, North Fifth Street and Lambert Avenue are much further downgradient and should not be effected by the Fairchild plume.

VOCs were detected in the shallow wells at the Albany Avenue Wellfield in 1977. The contaminated wells were taken out of service in early 1977 and remain off-line. Organic chemical contamination has never been detected in the three deep wells at Albany Avenue, or at the other downgradient wellfields.

At the request of the NYSDOH, a private well survey was conducted downgradient of the Site between Route 110 and Great Neck Road, Wellwood Avenue and Sunrise Highway. Several private wells were identified during the survey, some of which were used as a drinking water source. The residents with homes supplied only by private drinking water wells identified during the survey were advised as appropriate on measures to reduce possible exposure to contaminants that may be in their drinking water. Many of these homes have since been connected to public water. Except for two homeowners who continue to refuse connection, all homes serviced by private drinking water wells located in and around Route 110 and Great Neck Road, Wellwood Avenue and Sunrise Highway have been connected to public water at no cost to the homeowner. The two remaining homes have been referred to the Suffolk County Department of Health (SCDHS).

Exposure to site-related chemicals in the public water supply is unlikely since routine monitoring of the public drinking water supply wells has not detected contamination above MCLs. SCDHS recently notified the NYSDEC that the Great Neck Road Wellfield has started to show low levels of dichloroethylene, currently below MCLs, in the monthly sampling. Portable carbon adsorption units are currently in place. The NYSDEC, in implementing the Fairchild ROD, is reviewing the data to determine whether this contamination is attributable to Fairchild and is monitoring the situation to ensure that the Suffolk County Water Authority is providing water that is potable.

Previous Interim Remedial Measures (IRMs)

Interim Remedial Measures (IRMs) are conducted at sites when a source of contamination or exposure pathway can be effectively addressed

before completion of the RI/FS. Fairchild Republic has elected to implement two IRMs at the Main Plant Site. The first IRM consisted of two soil vapor extraction (SVE) systems in Building 17. One SVE system addressed the TCE associated with the vapor degreaser located in the southwest corner of Building 17. The second SVE system addressed the PCE associated with the PCE tank located adjacent to the southeast portion of Building 17. The SVE systems operated beneath the slab of Building 17 for more than one year. The SVE effluent prior to treatment approached non-detect after a period of pulsing the system. Test results of the soils were compared to NYSDEC TAGM 4046 guidance values. These results demonstrated that VOCs were effectively removed from the soils beneath Building 17. Both SVE systems were decommissioned in March 1997.

The second IRM consisted of excavating and removing chromium contaminated soils from the Site. These soils were placed in the Old Recharge Basin with the restriction that they must be placed a minimum of 10 feet below ground surface and 5 feet above the water table. None of the chromium analytical results for these soils exceeded chromium concentrations that currently exist in the Old Recharge Basin. The completed soil vapor extraction system, the chromium soil IRM, and the RCRA closure have removed all source areas from the MPS soils.

Remediation

In March 1998, the DEC issued a ROD for the Fairchild Republic Main Plant Site. The ROD called for groundwater pump and treat with a public supply wellhead treatment contingency. The pump and treat system will be designed to intercept the 1,000 ppb total VOC plume south of the Main Plant Site. The primary elements of the selected remedy are as follows:

1. A predesign investigation to determine the geology of and the optimum location for the groundwater extraction wells. The predesign investigation and the long term monitoring program will also include the development of a groundwater model of the aquifer, plume tracking, plume tracking updates and plume modeling periodic updates.

2. A remedial design program to verify the components of the design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program.

3. Groundwater extraction to address contamination above 1,000 ppb of the total VOC plume to the south of the MPS.

4. Long-term monitoring of the extraction well system.

5. Installation and quarterly monitoring for VOCs of outpost monitoring wells installed for the East Farmingdale Water District and the Suffolk County Water Authority. If necessary, outpost monitoring will be added for the Suffolk County Water Authority North Fifth Street Well and/or the Lambert Avenue Well and/or the Great Neck Road Wells.

6. A wellhead treatment contingency plan for the design, construction, operation and maintenance of wellhead treatment systems, if necessary.

7. The East Farmingdale Route 109 and SCWA Tenety and Albany Avenue Wellfields will be sampled on a monthly basis for total volatile organic compounds.

8. Connection of any private drinking water wells within and around an area between Route 110 and Great Neck Road, Wellwood Avenue and Sunrise Highway.

In March 1999, the DEC executed a Remedial Design/Remedial Action (RD/RA) Consent Order for the design and construction of the remedial program at the Fairchild site. The design work plan was submitted for review in May 1999 and comments were forwarded to Fairchild. The revised design workplan was approved in September 1999. The conceptual model for the groundwater was submitted by Fairchild's consultant for review in January 2000. As of August 2001, the pre-design investigation is nearing completion and the design is at the 35% phase. The installation of a test well for pump and treat has been completed and the consultant has submitted a schedule for completing the pump test and the remedial design. The final design should be complete by October 2001 and construction should begin early in 2002.

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)?

___ If no (exposures can not 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 and Reference(s): _____

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 and Reference(s): _____

[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.

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 Fairchild Republic Co. facility located at East Farmingdale, NY under current and reasonably expected conditions. This determination will be re-evaluated when the 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 _____ Date _____
Eric Hausamann
Environmental Engineer 2

Supervisor _____ Date _____
James Harrington
Bureau of Program Management
Division of Environmental Remediation

Director _____ Date _____
Paul J. Merges, Ph.D.
Bureau of Radiation and Hazardous Site Management
Division of Solid and Hazardous Materials

Locations where References may be found:

New York State Department of Environmental Conservation
Region 1
SUNY Campus Building 40
Stony Brook, NY 11790

Contact telephone and e-mail numbers

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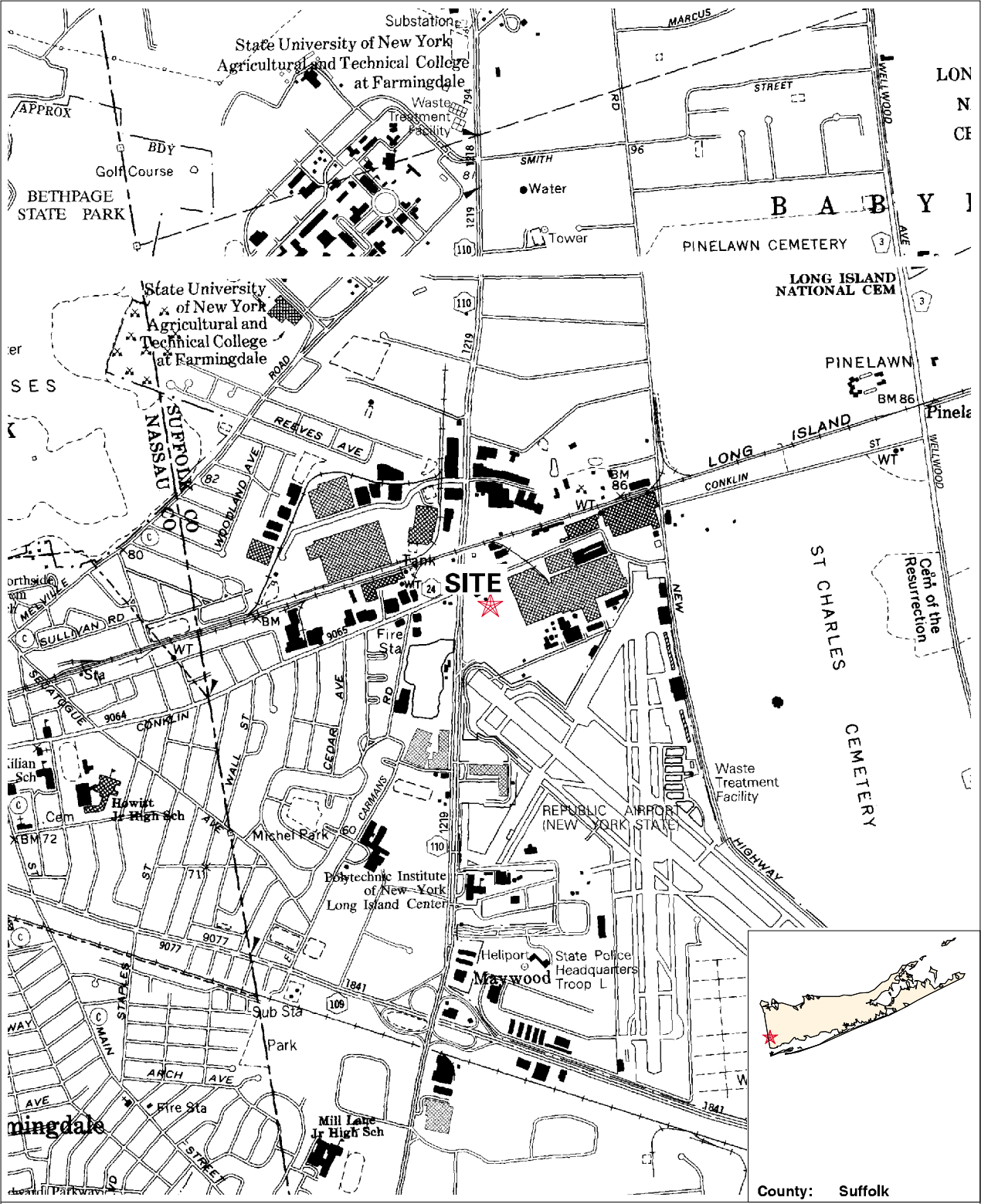
FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.



Site Location Map

152130 Fairchild Republic Aircraft Main Plant

NYSDOT Planimetric Quadrangle(s):
HUNTINGTON, AMITYVILLE

N

0 500 1000 1500 2000
FEET

Scale 1:24,000