



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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SITE 3-1731-02
RECEIVED 3.11

ARGEO PAUL CELLUCCI
Governor

TRUDY COXE
Secretary
DAVID B. STRUHS
Commissioner

August 26, 1997

Mr. Daniel Coughlin, Chief
Massachusetts Superfund Section
USEPA
JFK Federal Building, HBO
Boston, MA 02203

Dear Dan:

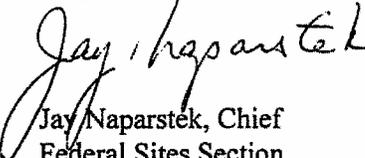
Enclosed please find the Groundwater Use and Value Determination prepared by DEP for the Industri-Plex site. This first Use and Value Determination conducted by DEP, pursuant to the recently finalized Guidance developed by EPA, was done as a pilot in anticipation of the signing of a Memorandum of Agreement between the two agencies.

In determining the use and value of the groundwater in the vicinity of the Industri-Plex site, we referred to the aquifer classification contained in the Massachusetts Contingency Plan. As we have discussed, the classification in the MCP gives consideration to all of the eight factors contained in the Use and Value Guidance. Enclosed with the Use and Value Determination is a copy of the GIS map used to determine the aquifer classification. This map provides a variety of information, including the USGS yield classification, the presence of public water supplies and zones of protection, surface water bodies, wetlands and protected open space areas.

I trust you will find this example of how we will conduct Use and Value Determinations under the MOA acceptable. If so, I believe we are ready to finalize the MOA and begin implementing these determinations on other NPL sites. The most recent version of the MOA was drafted by Bill Walsh-Rogalski of your office. I have included a copy of the comments we submitted on that draft. If you are satisfied with the Industri-Plex example, please send us a final version of the MOA for review and signature.

If I can be of any further assistance on this, please do not hesitate to call me at 292-5697.

Very truly yours,


Jay Naparstek, Chief
Federal Sites Section

GROUNDWATER USE AND VALUE DETERMINATION PILOT
Industri-Plex Superfund Site

August, 1997

Consistent with the Environmental Protection Agency's (EPA) 1996 Final Ground Water Use and Value Determination Guidance, the Department has developed a "Use and Value Determination" of the groundwater impacted by the Industri-Plex Superfund Site (the "Site"). The purpose of the Use and Value Determination is to identify whether the aquifer at the site should be considered of "High, Medium", or "Low" use and value. In the development of its Determination, the Department has applied the criteria for groundwater classification as promulgated in the Massachusetts Contingency Plan (MCP). The classification contained in the MCP considers criteria similar to those recommended in the Use and Value Guidance. The Department's recommendation supports a low use and value for the Study Area groundwater. An explanation for the determination is outlined below.

The Industri-Plex Superfund Site (the "Site") covers approximately 245 acres of land in Woburn, Massachusetts. Contamination at the Site includes soils containing arsenic, chromium, lead, and odorous tannery wastes; and groundwater and surface water containing heavy metals and volatile organics. The soil remedy is nearly complete, but the groundwater and surface water at the site are still under investigation. For the purposes of this Determination, the groundwater under evaluation is defined as the extent of the Groundwater/Surface Water Investigation Plan (GSIP), which includes and expands upon the boundaries for the soil remedy (See Figure A, the "Study Area").

The aquifer underlying much of the Study Area is classified as medium or high yield by the United States Geological Survey (USGS). Portions of the north, southeast and southwest regions of the Area are classified as low yield. Despite the medium/high yield classification of a significant portion of the aquifer, the Department has classified the Study Area as a Non-Potential Drinking Water Source Area because of its concentrated industrial development. More specifically, the Study Area aquifer is classified as both GW-2 and GW-3 (see description below). Table 1 reviews the Study Area with respect to the eight factors contained in the Use and Value guidance.

There are no public or private wells in the Study Area. However, the southern border at Route 128 is the edge of the Wells G + H Interim Wellhead Protection Area (IWPA). Wells G + H are inactive, but are still considered a public drinking water supply. The medium and low yield portions of the Area aquifer flow into this IWPA. Study Area groundwater must meet drinking water standards (the GW-1 classification) before entering the IWPA.

For the purposes of the risk assessment of the Study Area groundwater, the Department defines a GW-2 classification as areas where there is a potential for migration of vapors from groundwater to occupied structures. The classification applies to locations where groundwater has an average annual depth of 15 feet or less and where there is an occupied building or structure within a 30 foot surface radius of that groundwater. The GW-3 designation considers the impacts and risks associated with the discharge of groundwater to surface water and therefore applies to all

groundwater. Considering these classifications, the groundwater risk evaluation for the Industri-Plex site should include, but is not limited to, the following:

Human Health:

- a) vapor seepage into buildings,
- b) use of the water in industrial processes,
- c) excavation into groundwater (i.e., worker exposure),
- d) discharge into surface water (and the consequential effects of the discharge-- i.e., wading scenarios, recreation, fishing).

Ecological:

- a) effects on the biota that make up the benthic community,
- b) effects on the biota that feed on or in the benthic community, and on up the food chain, as determined by the substance's persistence and ability to bioaccumulate.

In light of the use and value factors and similar criteria established in the MCP that were examined in this determination, the Department supports a low use and value for the Study Area aquifer. The Department welcomes the opportunity to participate in this new approach to evaluating groundwater, which furthers the goal of making more consistent and realistic remedial groundwater decisions at Superfund sites.

TABLE 1
INDUSTRI-PLEX SITE GROUNDWATER USE AND VALUE DETERMINATION PILOT
August, 1997

USE AND VALUE FACTORS	INDUSTRI-PLEX SITE: #3-1731 SITE-SPECIFIC DETERMINATION
Quantity	<ul style="list-style-type: none"> -Medium/High Yield, small portions Low Yield -Medium/High Yield covers entire south-western portion of the OU-1 portion of the site, and three quarters of the Groundwater/ Surface Water Study Area down to Route 128.
Quality	<ul style="list-style-type: none"> -Elevated levels of total magnesium, calcium, sodium, and iron and other metals in Study Area groundwater. Site groundwater contaminants include volatile organics (primarily benzene and toluene), and metals (primarily arsenic and chromium).
Current Public Drinking Water Supply	<ul style="list-style-type: none"> -No Wellhead Protection Area within the Study Area, but the study area borders the Wells G & H IWPA to the south. -Horne Pond wells supplemented by MWRA water are supplied by town for drinking water. -It is not a sole Source Aquifer.
Current Private Drinking Water Supply	<ul style="list-style-type: none"> -No known private drinking water supplies in the Study Area.
Likelihood and Identification of Future Drinking Water Use	<ul style="list-style-type: none"> -Study Area groundwater is designated by the State as a Non-Potential Drinking Water Source Area. -Study Area is highly urbanized: industrial and commercial development, with some residential at southeast. -Not designated by the Town as an area for future drinking. -No known Activity and Use Limitations on the Study Area properties.
Other Current or Reasonable Expected Ground Water Use(s) in Review Area	<ul style="list-style-type: none"> -Several groundwater wells in the area are used for non-potable activities such as irrigation. -In the future, possible increase in production well use, and use of well water for irrigation.
Ecological Value	<ul style="list-style-type: none"> -Groundwater discharge to Halls Brook, Halls Brook Holding Area, and the Aberjona River.
Public Opinion	<ul style="list-style-type: none"> -Public comment occurs during the promulgation of MCP regulations, and under CERCLA will occur during the Record of Decision process. -No known petition in process for a change in groundwater classification in the Study Area. Would expect substantial opposition to possible use as a water supply.

MA DEP - Bureau of Waste Site Cleanup

SITE NAME:

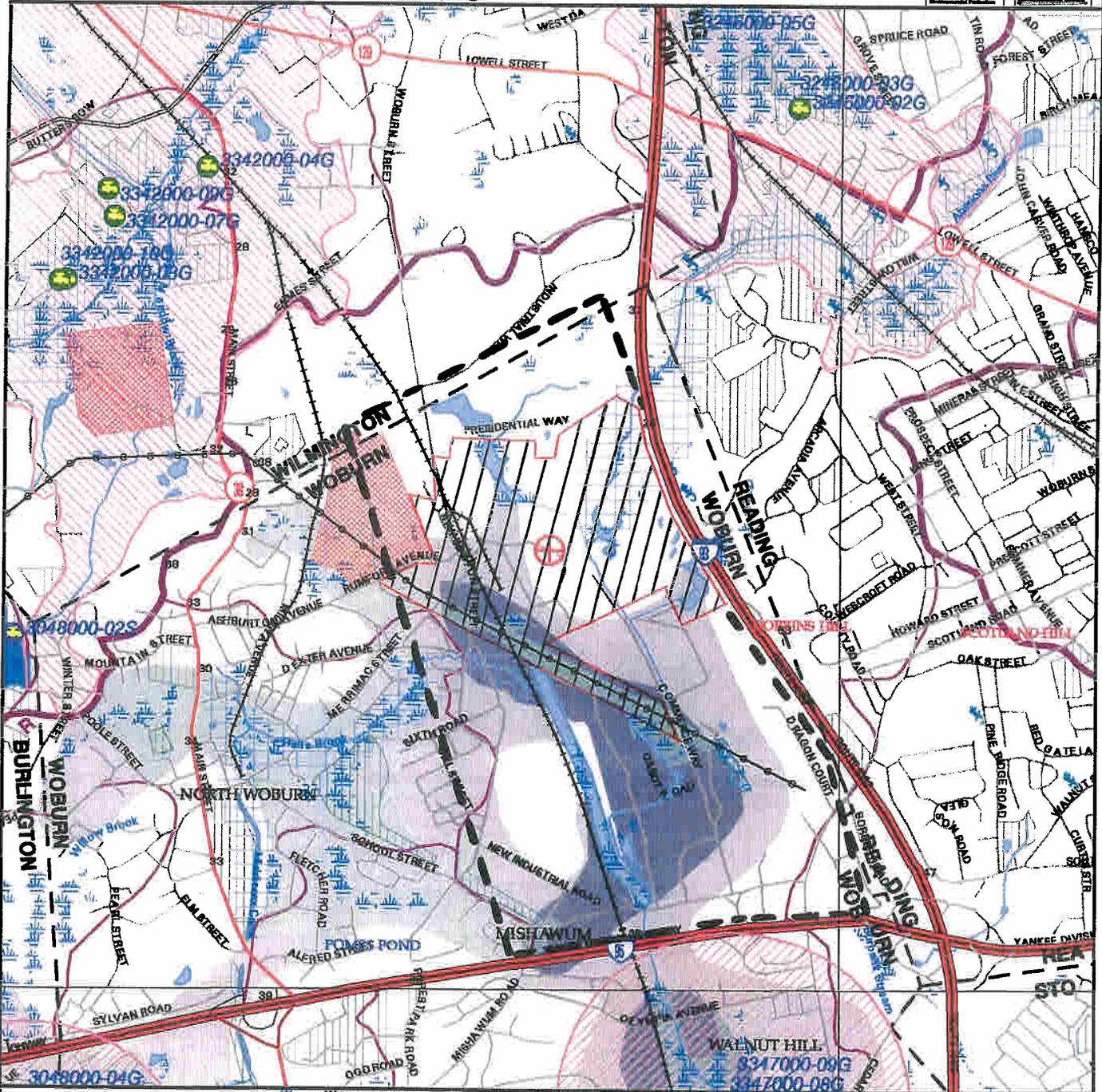
Industriplex 42 31 07n 71 08 29w

STUDY AREA

INDUSTRI-PLEX SITE

FIGURE A: STUDY AREA

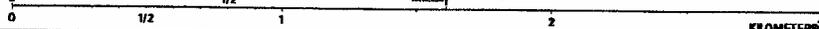
The information shown on this map is the best available at the date of printing. Please refer to the data source descriptions document.



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|---|--|--|
| Roads: Interstate, US, State, Street, Trail | EPA Designated Sole Source Aquifer | Public Water Supplies: Ground, Surface, Non Community |
| Boundaries: Municipal, County, DEP Region | Approved Zone 2: MPA | Hydrography: Water Features, Public Surface Water Supply |
| Train; Powerline; Pipeline | Wetlands: Fresh, Salt, NHESP Wetlands Habitat | Protected Open Space; ACEC |
| Drainage Basins: Major, Sub | Potentially Productive Aquifers: Medium Yield, High Yield | DEP Permitted Solid Waste Facilities; Certified Vernal Pools |
| Streams: Perennial, Intermittent, Aqueduct | Non-Potential Drinking Water Source Area: Medium, High Yield | |



SCALE 1:25000



June 27, 1997