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EPA

Potential Insurance Products for Brownfields Cleanup and Redevelopment

Survey Results of Insurance Industry Products Available for Transference of Risk at Potentially Contaminated Property

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Executive Summary

A. Background of Survey

EPA's Brownfields Economic Redevelopment Initiative is designed to empower states, communities, and other stakeholders to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse potentially contaminated properties. Key players in economic redevelopment (prospective purchasers, redevelopers, lenders, and investors) are sometimes reluctant to pursue redevelopment activities at brownfields, however, for fear of incurring potential liability. These liability risks leave many properties idle. Most liability risks can be grouped into three broad categories:

- **Remediation-based Risks** — the potential that if site contamination exists, the owner/operator will bear the costs of cleanup, including site investigation and assessment, legal fees, and regulatory compliance consulting fees

- **Property Value Impairment Risks** — the potential that if site contamination exists, the owner/operator will bear the costs of lawsuits stemming from reduced value of neighboring properties and/or nuisance caused

- **Personal Injury Risks** — the potential that if site contamination exists, the owner/operator will bear the costs of lawsuits stemming from bodily injury caused by contamination existing on-site or migrating off-site.

Some parties assert that insurance products in existence or under development successfully transfer these risks from the key players involved in brownfields redevelopment to a third party. EPA conducted this survey to test this assumption by addressing the following three questions:

- Are insurance policies in existence or under development that could serve as risk transfer mechanisms for potentially contaminated properties?

- If policies exist or are under development, how many of the risks encountered at potentially contaminated properties (i.e., remediation-based risk, property value impairment risks, and personal injury risks) are covered, and how available are these policies?

- If no policies exist or are under development for specific risks, what factors are inhibiting their development and use?

To answer these questions, EPA:

- Identified no more than nine representatives of the insurance industry, noted by industry contacts to be the key players

- Developed a list of questions to be used in phone interviews with the insurance representatives

- Developed a standard list of risks, to maintain consistency when insurance representatives referred to risks covered or not covered

- Conducted interviews

- Compiled and analyzed responses to answer the three key questions.

B. Summary of Key Findings

Eight insurance industry representatives were interviewed for this survey. The following key findings emerged:

- All respondents indicated that insurance is available and is being purchased.

- All respondents indicated that the nine risks listed encompassed all known risks encountered at potentially contaminated sites.

- Five respondents cover all of the risks under existing insurance products; the remaining respondents cover all but property value impairment risks.

- Minimum coverage ranged from $1 million to $100,000 per policy.

- Maximum coverage generally ranged from $10 to $40 million per policy.

- Typical coverage ranged from $2 million to $10 million per policy.

- Typical premium costs were approximately $5,000 per $1 million in coverage.

- Five respondents noted increased demand for environmental insurance policies in those states that have active brownfields programs or state voluntary cleanup programs.

- Common suggestions for EPA involvement included clarification of liability issues, more consistent implementation of risk-based corrective action (RBCA) standards, and education about the availability of risk transfer insurance products.

The following report discusses the findings of this survey in greater depth. Section I provides an overview of the potential risks encountered by owners of potentially contaminated property and discusses common ways key players control these risks, including the use of insurance. Section II describes how the insurance industry works and provides an overview of the main environmental insurance products, a discussion of the survey findings, and market factors that influence environmental insurance policies. Section III offers concluding remarks and recommendations.

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I. Environmental Risk and Potentially Contaminated Properties

A. Risk Description

The commercial real estate industry has many uncertainties, or risks, that affect the willingness or ability of potential players to participate in brownfields property transactions. Many risks, such as changes in market conditions and interest rates, are inherent in the industry and provide opportunities for economic gain with limited risk. Risks such as environmental liability, however, are not viewed as inherent in the industry and often present greater potential for economic loss than for economic gain. Many of these environmental risks encountered at potentially contaminated properties fall into three broad categories: remediation-based risks, value impairment risks, and personal injury risks.

The first category of environmental liability risks is **remediation-based risks**, related to Federal and state environmental laws and regulations that mandate cleanup under certain circumstances. These risks include:

Risk 1: Cost of identification and determination of site contamination

Risk 2: Cost of site remediation

Risk 3: Cost of ensuring compliance with Federal and state regulations during remediation (e.g., consulting and legal fees)

Risk 4: Cost of legal fees to defend against lawsuits brought by regulators (Federal and state) and third parties.

The second category of environmental liability risks is **property value impairment risks** attributable to site contamination, or to the perception that the site is contaminated. These risks are pursued through tort liability and include:

Risk 5: Payment required due to a nuisance caused to a neighboring property (e.g., remediation of the site causes substantial noise in the neighborhood – a nuisance)

Risk 6: Payment required due to the erosion of equity of a neighboring property (e.g., the perception that there is contamination on the site causes the value of a neighboring property to decline)

Risk 7: Payment required due to the decreased security interest of the lender of a neighboring property (e.g., on-site contamination causes the value of a foreclosed neighboring property to decline).

The third category of environmental liability risks is **personal injury risks**. Also pursued through tort liability, these risks include:

Risk 8: Payment required because of personal injury occurring off-site caused by migrating contaminants

Risk 9: Payment required because of personal injury occurring on-site caused by site contamination.

B. Common Controls for Risks

The above risks can be reduced or eliminated in several ways, thereby increasing the willingness of transaction decision-makers to pursue redevelopment at potentially contaminated properties. Parties can control environmental risks in several ways:

- <u>Indemnification Agreements</u> — The seller provides the purchaser with a legally binding agreement stating that the seller will cover the purchaser's costs stemming from specified environmental risks (e.g., the purchaser will cover the cost of on-site remediation for contamination undiscovered at the time of the property transaction).

- <u>Sell Price Adjustment</u> — The seller will reduce the price of the property based on an agreed upon level of risk incurred by the purchaser (e.g., a $5 million property with known contamination faces remediation costs between $1 million and $3 million; because of the risk that remediation may cost as much as $3 million, the seller reduces the purchase price to $2 million).

- <u>Self Insurance</u> — A purchaser ensures that he/she can cover the costs of potential environmental risks by setting aside a reserve fund, or by pooling money in a reserve fund with other companies (e.g., a well-capitalized company uses its reserve fund to remediate contamination at a neighboring property caused by migrating contaminants from the self-insured company's property).

- <u>Third-party Insurance</u> — The seller or purchaser buys insurance to cover the environmental risks encountered at a potentially contaminated property (e.g., the purchaser of a potentially contaminated property buys an insurance policy that covers up to $10 million of remediation costs for unknown site contamination).

II. INSURANCE RISK TRANSFER MECHANISMS

A. Overview of Insurance Industry and Products

Insurance is one of the best available tools for transferring and managing certain financial risks. Through a complex process of risk determination, insurance companies determine what risks encountered by businesses or individuals can be covered, or underwritten, and then collect premiums for the policies, under which they agree to pay for some or all costs or losses to these insured parties. Insurance companies perform this risk determination through the following generic, three-step process:

- <u>Statistical or Actuarial Analysis</u> — a process to develop a profile of specific risks and the potential costs or losses associated with these risks. This profile is developed using historical data accumulated on similar clients.

- <u>Underwriting Analysis</u> — a process to establish a relationship between a risk and its expected loss for a specific client. This analysis varies depending on the type of risk to be covered, but for potentially contaminated properties can include an analysis of site engineering data, business / financial stability, the business' regulatory compliance history, and surrounding site use.

- <u>Judgment</u> — a discretionary determination made by an insurance company on coverage of risks, particularly when there is insufficient data. In the case of risks at potentially contaminated property, this judgment is affected by two major concerns:

  — *Uncertainty of Liability* — Under CERCLA, this incorporates how retroactive, strict, and joint and several liability can affect potential costs to cover risks.

  — *Economic Conditions in the Insurance Industry* — The conditions include the number of paid claims incurred based on policies sold, as well as the willingness or ability of the reinsurance market (such as Lloyds of London) to absorb some of an insurance company's risks of future claims in exchange for a percentage of the premiums.

Through experience, the insurance industry has collected sufficient data to understand and underwrite the financial risks associated with potentially contaminated properties. Thus, environmental insurance has developed as a distinct subset of property and casualty insurance, which also includes homeowner and auto insurance. The three most common policies available under environmental insurance that are applicable to potentially contaminated properties are:

- Property transfer insurance
- Cleanup cost cap or stop loss insurance
- Owner-controlled insurance.

Property transfer insurance protects an insured against on-site cleanup of unknown, pre-existing, or new conditions, and against third-party claims for off-site cleanup costs that result from on-site pollution. An insured can add to this coverage claims from third parties arising on-site or off-site from bodily injury or property damage due to on-site contamination. This policy can provide coverage of remediation-based risks, value impairment risks, and personal injury risks.

Cleanup cost cap or stop loss insurance protects an insured against a cleanup project that runs substantially over budget. Policies require the insured to accept the risk of the project going over budget by a certain percentage of the estimated project costs. The insurer pays only if the project costs exceed the estimated costs, plus the agreed upon buffer. This policy can provide coverage of remediation costs.

Owner-controlled insurance allows an owner or prime contractor undertaking cleanup to determine the desired scope of insurance protection against the acts or omissions of other parties involved in the cleanup. This includes protection against the failure to perform by consultants, contractors, and subcontractors; against these parties' aggravation of site contamination conditions; and against claims of contractors' employees or other third parties for bodily injury arising from site contamination. This policy can provide coverage for remediation-based risks, value impairment risks, and personal injury risks.

By clarifying how the insurance industry develops methodologies to cover risk, and how this process has been applied to environmental insurance for property transfer, the current market for these products can more clearly be understood.

B. Survey Findings

EPA developed a survey to answer three questions: 1) Are insurance policies in existence or under development that could serve as risk transfer mechanisms for potentially contaminated properties? 2) If policies exist or are under development, how many of the risks encountered at potentially contaminated properties are covered, and how available are these policies? 3) If no policies exist or are under development for specific risks, what factors are inhibiting their development and use?

To answer these questions, EPA developed a list of potential risks and questions related to the coverage of these risks. Using this list, EPA interviewed eight representatives from three segments of the insurance industry: underwriters, insurance providers, and brokers (see Attachment 1 for a list of the insurance representatives and the segment of the insurance market they represent).[1]

QUESTION 1: DO POLICIES EXIST?

The unanimous answer to Question 1 was "yes." Environmental insurance policies that manage the financial risks encountered at potentially contaminated properties have existed for several years.

QUESTION 2: WHAT RISKS ARE COVERED / HOW AVAILABLE ARE THE POLICIES?

The answer to Question 2 is summarized in four major categories: risks covered, scope of coverage, cost of coverage, and demand for coverage. (Tables 1 and 2 are attached to provide a quick reference for determining each representative's responses in these four major categories.)

Risks Covered: Respondents were asked about the availability of coverage for environmental risks related to remediation, value impairment, and bodily injury. The following summarizes the respondents' comments (Table 1 provides individual responses):

- The market covers environmental risks associated with remediation, value impairment, and bodily injury, although not all companies represented provide coverage for each of these areas.
- Remediation-based risks and personal injury risks are the easiest environmental risks to cover.
- Property value impairment risks are the most difficult to cover, although some coverage for these risks is currently available.

Scope of Coverage: Respondents were asked to provide specific information on limits of coverage for these risks (Table 2 provides individual responses):

- The minimum amount of coverage ranges from $100,000 to $1 million per policy, with several respondents indicating that they could offer lower coverage if needed.
- The maximum amount of coverage offered ranges from $10 to $40 million per policy.

[1]Underwriters collect and analyze potential client data to determine what risk coverage can be offered and at what premium. Insurers provide the actual risk assumption for the policies sold, through the pool of invested premiums, or through reinsurers who accept some of the risks for a percentage of the premiums. Brokers are the marketing / sales arm of insurance policies, providing direct sales and service to potential clients.

Table 1: Risks Covered by Respondents

Risks	American International Group	ECI Inc.	ECS	Environmental Warrantee	The Eric Group	United Coastal	Willis Corroon	Zurich American
REMEDIATION-BASED RISKS								
Risk 1: Cost of identification and determination of site contamination	●	●	●	●	●	◐	●	●
Risk 2: Cost of site remediation	●	●	●	●	●	◐	●	●
Risk 3: Cost of ensuring compliance with Federal and state regulations during remediation	●	●	●	●	●	◐	●	●
Risk 4: Cost of legal fees to defend against lawsuits brought by regulators (Federal and state) and third parties	●	●	●	◐	x	◐	●	●
PROPERTY VALUE IMPAIRMENT RISKS								
Risk 5: Payment required due to a nuisance caused to a neighboring property	●	●	●	x	x	x	●	●
Risk 6: Payment required due to the erosion of equity of a neighboring property	●	●	●	x	x	x	●	●
Risk 7: Payment required due to the decreased security interest of the lender of a neighboring property	●	●	●	x	x	x	●	●

Key:

● = coverage of risk can be offered under existing policies;

◐ = coverage of risk can be partially offered under existing policies (third-party liability not covered);

x = coverage of risk cannot be offeree under existing policies

Table 1: Risks Covered by Respondents (continued)

Risks	American International Group	ECI Inc.	ECS	Environmental Warrantee	The Eric Group	United Coastal	Willis Corroon	Zurich American
PERSONAL INJURY RISKS								
Risk 8: Payment required because of personal injury occurring off-site caused by migrating contaminants	●	●	●	●	●	x	●	●
Risk 9: Payment required because of personal injury occurring on-site caused by site contamination	●	●	●	●	●	●	●	●

Key:

● = coverage of risk can be offered under existing policies;

◐ = coverage of risk can be partially offered under existing policies (third-party liability not covered);

x = coverage of risk cannot be offeree under existing policies

- The coverage is currently offered only for commercial and multi-family properties, not for residential properties.

Cost of Coverage: Respondents were asked about the typical costs to cover these risks (Table 2 provides individual responses):

- The average cost was $5,000 per $1 million in coverage.

- Costs per unit of coverage increased as the amount covered decreased.

- There was no average deductible, since the deductible varied widely based on the soundness of the business deal and the insured's desire for variations in coverage.

Demand for Coverage: Respondents were asked the number of policies sold covering these risks, the demand trend for coverage of these risks, and differences in demand among states (Table 2 provides individual responses):

- Demand for these policies has increased significantly since mid-1995, with two respondents noting several hundred percent increase in inquiries and policies sold since that time.

- Although not all respondents could provide actual numbers of policies sold, three indicated that they had sold between several hundred to over a thousand.

- Five of the respondents indicated that demand varied regionally, noting that states with active brownfields programs, active voluntary cleanup programs, and states using RBCA standards, had higher demand for these policies.

QUESTION 3: IF THERE ARE NO POLICIES, WHAT IS INHIBITING THEIR DEVELOPMENT?

According to respondents, policies exist that cover all known risks.

Table 2: Summary of Coverage for Risks

Risks	American International Group	ECI Inc.	ECS	Environmental Warrantee	The Eric Group	United Coastal	Willis Corroon	Zurich American
SCOPE OF COVERAGE								
What is the maximum coverage available?	$35 million	$15 million	$60-100 million	$40 million	$10 million	No answer	No answer	$10 million
What is the minimum coverage available?	$1 million	$100,000	$200,000	$1 million	Typically $1 million, but can be as low as necessary	$250,000	Typically $1 million, but can be as low as $500,000	Typically $1 million, but can be as low as necessary
What is the typical coverage sold?	No answer	$1-5 million	No answer	$2-5 million	$1-10 million	No answer	No answer	Up to $10 million
COST OF COVERAGE								
What are the typical premium costs?	$5,000 / million covered	$5,000 / million covered	No answer	$5,000 / million covered	$5,000 / million covered	No answer	No answer	No answer
DEMAND FOR COVERAGE								
How many policies have you sold?	No estimate	Less than 100	25,000 clients are covered for parts of risks	70	Over 1,000	No answer	No answer	Several hundred
What is the recent increase in inquiries and policies sold, if any at all?	No estimate	No estimate	15 to 20 percent	300 to 400 percent	200 percent	15 to 20 percent	More inquiries over last 3 months than over last 5 years	No estimate, but increase only in inquiries

C. Market Factors Influencing Insurance Policies

Survey results indicate that a growing array of products transfer risks associated with potentially contaminated property from the players in economic development to a willing third party. Two groups of factors, however, influence the availability and marketability of useful policies. Both groups of factors may impact the application of this survey's results.

Availability Factors

Availability of environmental insurance products, or its absence, is influenced by factors inherent in both the insurance and the commercial real estate industries. These factors include:

- **Underwriting Factors: Cost of Cleanup —** In order to accurately price the coverage of risks, environmental insurers must create tools or underwriting methodologies (as discussed in Section II.A.). Respondents have developed underwriting methodologies which they deemed to be sufficient for this purpose. A key component of underwriting is the environmental consulting industry, which supplies much of the underwriting information to insurance underwriters (some insurance providers have their own environmental consulting staff). In its long history, the environmental consulting industry has been fairly predictable and consistent in its services, and is therefore an effective primary data source for insurance risk underwriting.

- **Underwriting Factors: Property Value Impairment** — Underwriting of property value impairment risks is directly related to appraisal industry practices. The appraisal industry's position is that value impairment attributable to environmental conditions is outside the purview of a routine appraisal, making it more difficult for insurance providers to underwrite property value impairment risks. Predictably, respondents indicated that property value impairment risk coverage is less often available, although some respondents do provide this coverage.

- **Market Factors: Product Awareness —** Many respondents were concerned that sufficient information is not available to the commercial real estate industry regarding the availability of environmental insurance products. If decision-makers in the marketplace are not aware of the availability of risk transfer tools, their usage in property transactions is greatly reduced. While this information dissemination is clearly the responsibility of the insurance industry, it was frequently suggested that EPA could provide useful support to the insurance industry's efforts to increase product awareness in the marketplace.

- **Legal Factors: Uncertainty —** A factor that impacts the extent of coverage is the uncertainties created by liability. Many respondents indicated a preference for jurisdictions where risk-based corrective actions standards have been implemented. It was further suggested that states with voluntary clean-up programs, as well active brownfields redevelopment programs provide a more favorable climate for environmental insurance. In addition, some respondents anticipate that as liability is further clarified, lender confidence will increase and coverage costs will decline.

Marketability Factors

Insurance products, even at reasonable costs, may not provide adequate incentive for players in economic redevelopment to purchase, redevelop, and reuse brownfields because the current products lack many factors necessary to make them "marketable." Three key issues, among many, affect insurance marketability:

- **Policies offered focus on the "high" end of the market** — The insurance industry tends to insure larger, well-financed transactions involving financially sound enterprises. Survey responses indicated the importance of financial soundness of the transaction and its parties in underwriting. While policy limits can be small, the relative cost of insurance increases as the policy limits decline. This limits the market appeal of insurance. Many brownfields' prospective purchasers may not qualify for insurance coverage because they are not as financially sound or well-financed as large corporations.

- Owners of properties still concerned with CERCLA liability — Many larger, financially strong companies are not interested in returning their properties to the real estate market until Federal and state hazardous waste laws further limit or clarify their liability following a cleanup and transfer of property. Even if a successive owner purchases insurance to cover its risk, the insurance company could seek payment from former owners for costs based on CERCLA's retroactive, strict, and joint and several liability. Some claim that a high percentage of brownfields are not placed on the market because of this uncertain future liability.

- **Lenders reluctant to finance properties** — Major sources of credit, like large, financially strong companies, fear being viewed as "deep pockets." They are not interested in financing the return of contaminated properties to the real estate market if contingent liability risks are unacceptable, based on the uncertainties of future liability.

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III. CONCLUSION

This report explores the risks encountered by prospective purchasers, lenders, investors, and redevelopers at potentially contaminated property, and common ways these risks are controlled or eliminated. Desire to control these risks has recently spurred a great increase in the risk transfer mechanisms of environmental insurance and the availability of products, breadth of coverage, and number of risks covered.

Survey results indicate that many policies are available to cover remediation, value impairment, and bodily injury at insured properties. There is a wide range of coverage and costs for coverage are continually declining. The survey suggests, however, that although insurance can facilitate the return of brownfields to productive reuse, limitations on its usefulness and applicability for all brownfields exist.

Finally, all survey respondents suggested several issues that could be addressed by EPA to encourage redevelopment and reuse of brownfields through the use of risk transfer insurance products. Most respondents identified two particularly relevant issues: lack of knowledge of available risk transfer insurance products; and lack of clear risks and CERCLA liability encountered at potentially contaminated properties. Insurers suggested that EPA pursue the following activities to address these concerns:

- **Educate** — EPA should help educate stakeholders (lenders, developers, investors, prospective purchaser, states, and localities) about the availability and use of insurance risk transfer mechanisms.

- **Clarify** — EPA should continue to clarify the liability encountered at these sites, including definitive closure of site liability.

- **Implement** — EPA should encourage broader and more consistent implementation of risk-based corrective action (RBCA) standards.

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Attachment 1:
Survey Contacts

COMPANY	INDUSTRY
American International Group	Insurer
ECI Incorporated	Underwriter/Broker
ECS	Underwriter/Broker
Environmental Warrantee	Underwriter/ Broker (for AIG)
The Eric Group	Underwriter/Broker (for Zurich)
United Coastal Insurance	Insurer
Willis Corroon Environmental Risk Management Services	Broker
Zurich American Insurance Group	Insurer

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Attachment 2:
Complete Survey Responses

Company **Page**

COMPANY: American International Group
INDUSTRY: Insurer

I. Do you have policies in existence or in development?

Yes.

II. What is the coverage of these policies?

A. Do these policies cover commercial or single-family properties?

We cover only commercial properties.

B. What risks are you covering?

All of the risks listed are covered in some form. Potentially contaminated properties are usually covered under our "Select" policy, which is a menu driven policy covering these risks. However, they usually include an exclusion for a re-opener.

i. What is the scope of coverage for these risks? Maximum coverage, deductible, etc.?

Maximum coverage is around $35 million and minimum coverage is $1 million. Deductibles can run as low as $10,000 and are variable depending on coverage.

ii. What are the underwriting criteria for covering these risks?

The criteria are based on engineering data, site history, condition of surrounding sites (releases, as well as former operations), and financial condition of the company.

iii. What is the demand trend for insuring these risks?

The demand for covering these risks is greatly increasing because we as insurers have more flexibility on coverage and the price of these policies has come down. There has been an increase in demand over the past several years, but I cannot give any specifics on the trend.

iv. How many policies have you sold?

I really have no estimate, but we have been writing these policies since 1980.

v. Are the trends different in certain states (i.e., have state laws affected the demand for these policies)?

There are demand differences in certain states where insurance can pass for financial responsibility requirements, but I have not seen a difference in demand for redeveloping properties.

vi. What are the costs (i.e., premiums) for covering these risks?

Premiums usually run around $5,000 per million of coverage.

vii. Do the relative costs of covering these risks increase as the value of the insured property decreases? If so, what needs to change for the relative costs to remain constant?

Property value really has no consideration in rating the property. “Is it good business” is the main question.

B. Why aren't [those risks not mentioned] covered under these policies?

All of the risks are covered in some manner.

i. What are the significant inhibitors to covering these risks?

No answer.

ii. Do you know of any companies covering these risks?

No answer.

iii. What needs to be changed, by EPA or other parties, to enable the coverage of these risks?

No answer.

iv. What needs to be changed, by EPA or other parties, to lower the cost of covering these risks?

No answer.

C. What would be the estimated amount of time needed to develop and market coverage of these risks, inception-to-market time?

The development can take a long time. For example, value diminution is very difficult to calculate.

D. Do you know of any other companies developing or selling these policies?

No answer.

III. How can EPA encourage or develop incentives for the use of these types of risk transfer mechanisms?

- Make it easier for the underwriter by encouraging such common sense approaches as the RBCA standards.
- Make it known that insurance is out there and can make investors more comfortable.
- Legislate requirements for the use of these types of financial assurance mechanisms for some transactions.

COMPANY: ECI Inc.
IDUSTRY: Underwriter/Broker

I. Do you have policies in existence or in development?

Yes.

II. What is the coverage of these policies?

A. Do these policies cover commercial or single-family properties?

We cover only commercial properties at this time, but have plans to develop similar policies for single-family properties.

B. What risks are you covering?

All of the risks can be covered in some way. For the risks of value impairment and taking, however, there must be very clear evidence proving the impairment and/or taking was caused by the insured property. Nuisance would be covered if it was connected to the release of contaminants.

i. What is the scope of coverage for these risks? Maximum coverage, deductible, etc.?

The scope of coverage is commonly $1 million to $5 million. The maximum has been around $15 million, but I have seen coverage for as low as $100,000 (however, at this level, the cost per dollar of coverage is more expensive). The amount of coverage varies greatly with the type of property covered. For example, an office building would require a smaller amount of coverage.

ii. What are the underwriting criteria for covering these risks?

Once again, this depends significantly on the historical use of the property. We usually require a regulatory records check, a baseline environmental survey, a Phase I, a compliance audit, a review of use of neighboring properties, and a review of whether the site must comply with RCRA, TRI, etc.

iii. What is the demand trend for insuring these risks?

I have seen the demand greatly increase, but I have only been writing these policies for three to four months so I cannot give a longer trend description. We have seen an increase in demand for coverage of small to mid-size industrial properties, and on the low end coverage such as office buildings.

iv. How many policies have you sold?

I have no specifics, but less than 100.

v. Are the trends different in certain states (i.e., have state laws affected the demand for these policies)?

In general, I believe that voluntary clean-up programs and the RBCA standards in states have increased the demand for insurance policies. However, I have seen a decrease in the potential demand in states where there are more stringent administrative requirements for voluntary clean-up of sites. Many people do not want to go through this administrative "red tape." (He did not give any specific states where this has happened.)

vi. What are the costs (i.e., premiums) for covering these risks?

I have seen costs as high as $100,000 per million in coverage and as low as $400 per million in coverage (this was for such properties as office buildings). A premium of $15,000 to $20,000 per million in coverage is the high average, with $5,000 per million in coverage being the most common.

vii. Do the relative costs of covering these risks increase as the value of the insured property decreases? If so, what needs to change for the relative costs to remain constant?

I really do not think the cost of insurance policies is a concern. I have not seen any relative cost problems.

B. Why aren't [those risks not mentioned] covered under these policies?

No answer.

i. ***What are the significant inhibitors to covering these risks?***

No answer.

ii. ***Do you know of any companies covering these risks?***

No answer.

iii. ***What needs to be changed, by EPA or other parties, to enable the coverage of these risks?***

No answer.

iv. ***What needs to be changed, by EPA or other parties, to lower the cost of covering these risks?***

- Do not require too many legal hoops to jump through for property cleanup and liability issues.
- Ensure a continuity of land use type (any changes in land use can throw kinks into the process).
- Allow insurance market competition only; this will bring the costs down.

C. What would be the estimated amount of time needed to develop and market coverage of these risks, inception-to-market time?

No answer.

D. Do you know of any other companies developing or selling these policies?

No answer.

III. How can EPA encourage or develop incentives for the use of these types of risk transfer mechanisms?

There are a number of things to pursue:

- Use financial responsibility requirements to ensure use of these policies.
- Take on an educational function. There is substantial misunderstanding of what products are available.

COMPANY: ECS	
INDUSTRY: Underwriter/Broker	

I. Do you have policies in existence or in development?

Yes.

II. What is the coverage of these policies?

A. Do these policies cover commercial or single-family properties?

Our policies cover only commercial properties.

B. What risks are you covering?

All risks on the list (the risks as described in Section I.A.) can be covered. Value impairment, although potentially covered, may not be covered if there is a known stigma attached to the property, such as being listed on CERCLIS.

i. What is the scope of coverage for these risks? Maximum coverage, deductible, etc.?

The maximum limit is about $60 million, but the market has seen up to $100 million. Coverage below $200,000 is not practical at this time, at least by larger insurance companies, because the premiums do not comparatively decrease below this amount. The deductibles range from $25,000 to $500,000.

ii. What are the underwriting criteria for covering these risks?

We look at financial information for the past 2-3 years as well as an engineering report (sometimes the insurance company will complete this report for free).

iii. What is the demand trend for insuring these risks?

With increasing focus on brownfields, we are just now seeing an increase in activities and voluntary cleanups, which is increasing demand for insurance. After the inception of the Brownfields program in January of 1995, there was a slight lag-time, and then there was about a 15 to 20 percent increase in demand. The Brownfields program sparked this increase because these properties were now in the public eye and had a name attached to them. In addition, local governments were getting anxious to get these properties back on the tax roll.

iv. How many policies have you sold?

Last year we sold about $200,000 in premiums covering these risks. Overall, we have about 25,000 clients covered for parts of these risks.

v. Are the trends different in certain states (i.e., have state laws affected the demand for these policies)?

States that have very active voluntary cleanup programs have greater demand, such as Pennsylvania, Illinois, Indiana, Michigan, Ohio, California, Louisiana, and Texas. For example, Pennsylvania has made clear its desire to do business on these properties. They have a fast track for preparation and help design cleanup plans.

vi. What are the costs (i.e., premiums) for covering these risks?

Premiums range from $10,000 up to $200,000 to $300,000 per million of coverage. An example is a policy that covers first and third party liability at $1 million in coverage for 3 years. This policy would cost between $12,000 and $15,000 (if the deductible was between $30,000 to $40,000).

vii. Do the relative costs of covering these risks increase as the value of the insured property decreases? If so, what needs to be changed for the relative costs to remain constant?

I have not viewed this question quite the way you have it phrased. What prevents the purchase and redevelopment of properties are other costs such as deductibles and fixed costs. Depending on the condition of the property (and thus the amount of these costs), purchasing the property may be worth the costs.

B. Why aren't [those risks not mentioned] covered under these policies?

We have not been asked to cover the costs of Risk #5, payment due to nuisance caused, under value impairment. First-party diminution is not widely available, but third-party diminution has been covered, and is currently being improved. There really aren’t any other risks missed or not covered. However, high-level radiation is one type of contaminant that is not covered.

i. What are the significant inhibitors to covering these risks?

There aren't really any inhibitors for value impairment, or diminution, but high-level radioactivity is too costly to cover.

ii. Do you know of any companies covering these risks?

No answer.

iii. What needs to be changed, by EPA or other parties, to enable the coverage of these risks?

No answer.

iv. What needs to be changed, by EPA or other parties, to lower the cost of covering these risks?

No answer.

C. What would be the estimated amount of time needed to develop and market coverage of these risks, inception-to-market time?

It takes a few weeks to a few months, depending on state legal requirements and paperwork, such as the forms approval process. The average time for development is probably about six months.

D. Do you know of any other companies developing or selling these policies?

No answer.

III. How can EPA encourage or develop incentives for the use of these types of risk transfer mechanisms?

Education, education, education!! Many of the key players are not aware of the availability and coverage of these policies. Many of your non-traditional sources of funding are part of this unknowledgeable group. Beyond just education, EPA needs to recommend the mechanisms to all players involved.

COMPANY: Environmental Warrantee
INDUSTRY: Underwriter/Broker (for AIG)

I. Do you have policies in existence or in development?

Yes.

II. What is the coverage of these policies?

A. Do these policies cover commercial or single-family properties?

Our company covers only commercial properties, but we are putting together similar single-family policies.

B. What risks are you covering?

Policies cover unknown contamination. Known contamination can be factored into properties through adjusted purchase price, adjusted financing, and reserve funds.

Policies started with an exclusion of known contamination and covered only first-party (because no one knew what third-party suits might include). In addition the policies covered only the said property, not surrounding properties.

Policies now include third-party and off-site lawsuits for most of the risks remediation, value impairment, and personal injury (those not included will be mentioned later).

i. What is the scope of coverage for these risks? Maximum coverage, deductible, etc.?

The scope of coverage varies greatly with the underwriting criteria. There is no maximum coverage or standard deductible. However, the low side of coverage is usually around $1 million, and the high side of coverage is around $40 million, with an average of $2 million to $5 million. Although the minimum coverage is currently $1 million, Environmental Warranty is developing two new policies with coverage from $250,000 to $500,000, and $500,000 to $1 million.

The deductibles range from $10,000 to $100,000, with 8 out of 10 policies written with a deductible in the $25,000 to $50,000 range.

ii. What are the underwriting criteria for covering these risks?

Underwriting criteria were very stringent in the past, requiring extensive due diligence. As insurance companies have become more comfortable with the risks, these criteria have begun to relax.

iii. What is the demand trend for insuring these risks?

Demand has increased greatly for these policies. Since last July and August, we have seen a 300 to 400 percent increase in demand for these policies. The reason for this dramatic increase is based on three things:

- Environmental Warrantee moved away from their original carrier (SafeCo) to two other carriers (Zurich American and AIG) which caused the submission acceptance to go way up (the two new carriers are more willing to cover risks).
- The underwriting of policies in general has broadened coverage.
- The market is finally waking up with more refinancing, more securitization work, and lenders requiring insurance on collateral properties.

iv. How many policies have you sold?

During the period from January 1990 to January of 1995, we sold about 50 policies, while we have sold 20 policies during the last 2 months. Over the next year we expect to sell between 200 to 225 policies.

v. Are the trends different in certain states (i.e., have state laws affected the demand for these policies)?

The demands for these policies are more lender driven. We have not seen any states where the demand is significantly different than other states.

vi. What are the costs (i.e., premiums) for covering these risks?

The costs of covering these risks has gone through the floor. Three years ago, the cost for simple coverage of a $1 million policy was $10,000. Today, the cost for the same policy is $5,000.

vii. Do the relative costs of covering these risks increase as the value of the insured property decreases? If so, what needs to change for the relative costs to remain constant?

Using the minimum value of property as an excuse that it is too expensive to buy coverage is not a good excuse. Cost is only an easy excuse. We know of many lenders that incorporate the cost of the policies into the loans.

B. Why aren't [those risks not mentioned] covered under these policies?

Risk # 5, payment required because of nuisance caused, is a question. I guess that third-party lawsuits based on nuisance would not be covered.

Risk # 6, payment required because of decrease of property equity, can't really be covered. The erosion of equity problem is based on "says who" criteria. There are just too many opinions on how much, and why equity has eroded.

All value impairment risks are nearly impossible to insure. The ability to define perception has too many variables. For example, the Federal or state governments may change their minds on liability. Even with a letter of closure, there is always that "but we reserve the right" clause.

i. What are the significant inhibitors to covering these risks?

Covered above.

ii. Do you know of any companies covering these risks?

I don't know of any companies covering these risks.

iii. What needs to be changed, by EPA or other parties, to enable the coverage of these risks?

I cannot think of anything.

iv. What needs to be changed, by EPA or other parties, to lower the cost of covering these risks?

Some covered below.

C. What would be the estimated amount of time needed to develop and market coverage of these risks, inception-to-market time?

No answer.

D. Do you know of any other companies developing or selling these policies?

No answer.

III. How can EPA encourage or develop incentives for the use of these types of risk transfer mechanisms?

There are several things EPA can do:

- Develop a pilot program to encourage use of policies
- Decide what lending authorities need to be involved
- Develop a private sector task force with Financial Accounting Standards Board (FASB) for example
- Mandate these insurance policies
- Make these policies as universal as title insurance – simple
- Keep a property closed when you close a property
- Endorse the usage of these policies.

COMPANY: The Eric Group
INDUSTRY: Underwriter / Broker (for Zurich)

I. Do you have policies in existence or in development?

Yes.

II. What is the coverage of these policies?

A. Do these policies cover commercial or single-family properties?

The policies cover only commercial properties at this time.

B. What risks are you covering?

We cover most risks as listed on the predeveloped risk list (the risks as described in Section I.A.). Risks such as pre-existing, undetected / undiscovered, and on-going. Some common types include property transfer insurance, bodily injury from contamination, post-remediation insurance, and remediation stop-loss to cover remediation cost overruns.

i. What is the scope of coverage for these risks? Maximum coverage, deductible, etc.?

Maximum coverage is typically around $10 million, with the minimum usually around $1 million. Coverage can potentially go as low as the insured wants, but there is a minimum on cost or premiums regardless of how low the coverage is. For example, if someone wanted insurance coverage for $500,000 in cost overrun of known contamination, the premium would only be slightly less than coverage for $1 million. On the other hand, if someone wanted coverage for $500,000 for unknown contamination, the premium would be significantly less than policy coverage for $1 million. The deductible varies with the type of coverage, but usually has a minimum of approximately $10,000 with a typical amount of $50,000.

ii. What are the underwriting criteria for covering these risks?

We require a Phase I audit for most cases, remediation papers, and other checks and measures *iii.* ***What is the demand trend for insuring these risks?***

Demand has been a flat curve until about July 1995. Since then, the demand has increased 200 percent. Most of this increase has been due to Eric Group's expansion of coverage last May. We are also looking for a great increase in 1996 as many property portfolios are coming in.

iv. How many policies have you sold?

We have sold over 1,000 policies covering environmental risks. The policies provide coverage to over $2 billion worth of securitized mortgage transactions. The total value of real estate covered is probably over $5 billion.

v. Are the trends different in certain states (i.e., have state laws affected the demand for these policies)?

We have not seen a big difference among states, but Illinois, Ohio, Minnesota, New Jersey, Massachusetts, and Pennsylvania have all done a great job of encouraging redevelopment by relaxing risk-based cleanup.

vi. What are the costs (i.e., premiums) for covering these risks?

The premiums vary by risk and not size or value of the property. Cost for a 5-year policy in coverage is commonly around $10,000, and can go up to $100,000. For $2 million in coverage, the premiums range from $10,000 to $25,000 for most policies. For $5 million in coverage, the premiums range from $15,000 to $50,000.

vii. Do the relative costs of covering these risks increase as the value of the insured property decreases? If so, what needs to change for the relative costs to remain constant?

Yes, small properties have a higher relative premium. Premiums usually bring the value of the property back into the playing field, level with "greenfields." When the deal makes sense, premiums are not a concern.

B. Why aren't [those risks not mentioned] covered under these policies?

Risks on properties that have not been remediated, and where there is unresolved remediation are not covered. The property owner needs to either remediate or complete closure of a site.

Risk #4, legal fees under remediation-based risk, is not covered at this time, but could easily be covered.

Risk #5, payment required because of a nuisance, could be covered if a judgment was lawfully claimed.

Risk # 6, payment required because of decreased equity, is not currently covered, but I am sure models could be developed.

Value Impairment is not covered at this time but is probably calculable. We would need to know (1) how often something happens, and (2) how much it costs to get it done. I would be very interested in developing this type of policy.

i. What are the significant inhibitors to covering these risks?

The major inhibitor is undefined risks of EPA liability.

ii. Do you know of any companies covering these risks?

I don’t know of any companies covering these risks.

iii. What needs to be changed, by EPA or other parties, to enable the coverage of these risks?

Regulations need to be reasonable regarding remediation policies, and EPA needs to be firm on going further with liability, such as re-openers, even though we can deal with re-opener clauses to a certain extent.

iv. What needs to be changed, by EPA or other parties, to lower the cost of covering these risks?

There is nothing EPA can do to lower these costs, but they do need to be at the table to clarify things.

C. What would be the estimated amount of time needed to develop and market coverage of these risks, inception-to-market time?

The usual amount of time needed is about 1-2 years for development.

D. Do you know of any other companies developing or selling these policies?

No answer.

The Eric Group

III. How can EPA encourage or develop incentives for the use of these types of risk transfer mechanisms?

- The Federal government should not be in the insurance business. However, HUD and DOC may have an interest in encouraging the use of these policies.

- EPA needs to provide a mechanism to require and allow the use of public funding for insurance premiums.

- EPA should make sure all parties involved in property transactions are aware of the availability of insurance.

- EPA should use incentives to encourage the use of insurance. For example, if insurance is in place on a property, EPA should relax certain procedures.

COMPANY: United Coastal Insurance
INDUSTRY: Insurer

I. Do you have policies in existence or in development?

Yes.

II. What is the coverage of these policies?

A. Do these policies cover commercial or single-family properties?

The policies cover only commercial properties at this time.

B. What risks are you covering?

Our company covers unknown contamination. In situations where the contamination is known, there is a purchaser / seller indemnification agreement where the purchaser sits behind this agreement and the seller may purchase a policy.

i. What is the scope of coverage for these risks? Maximum coverage, deductible, etc.?

We can cover liability above certain levels of known contamination, up to $10 million. The coverage can go as low as $250,000. The scope of coverage really depends on the underwriting criteria.

ii. What are the underwriting criteria for covering these risks?

The criteria includes: assessment of on-site management and environmental practices, such as controls and safety measures; assessment of all hazards on-site and on surrounding sites such as number of USTs, the site's listing on CERCLIS, the site's requirements under RCRA, and whether the site is considered a large quantity generator. In addition, we look for ground water and surface water problems.

iii. What is the demand trend for insuring these risks?

The demand is high, but it has not been purchased a lot because costs are still too high. However, we have seen about a 15-20 percent increase in demand for these policies over that past year (no specific month of upturn was identified). This increase was attributed to the fact that lenders, buyers/sellers, and municipalities are requiring use of insurance policies for real estate transactions.

iv. ***How many policies have you sold?***

This information is proprietary.

v. ***Are the trends different in certain states (i.e., have state laws affected the demand for these policies)?***

The Transfer Act in New Jersey emphasizes site assessment and sheds more light on liability.

vi. ***What are the costs (i.e., premiums) for covering these risks?***

The costs are relatively expensive, but I cannot give specifics.

vii. ***(Question was not included on this interview.)***

B. Why aren't [those risks not mentioned] covered under these policies?

They are not covered due to the risks of third-party liability.

i. ***What are the significant inhibitors to covering these risks?***

It is difficult to define the potential liability.

ii. ***Do you know of any companies covering these risks?***

No answer.

iii. ***What needs to be changed, by EPA or other parties, to enable the coverage of these risks?***

EPA needs to do more to clarify the liabilities of property purchasers.

iv. ***What needs to be changed, by EPA or other parties, to lower the cost of covering these risks?***

EPA needs to seek out more PRP's, use joint and several liability, and relax and/or revamp many of the cleanup laws. It is too big an issue to define clean when it is very dependent on the desired use of the property.

C. What would be the estimated amount of time needed to develop and market coverage of these risks, inception-to-market time?

No answer.

D. Do you know of any other companies developing or selling these policies?

No answer.

III. How can EPA encourage or develop incentives for the use of these types of risk transfer mechanisms?

- (Could) Require policies.
- Distribute materials on the risks, and the policies that are available to cover the risks.
- Develop indemnification / protection on Brownfields for third-party lawsuits.

COMPANY: Willis Corroon Environmental Risk Management Services ***INDUSTRY:*** Broker

I. Do you have policies in existence or in development?

Yes.

II. What is the coverage of these policies?

A. Do these policies cover commercial or single-family properties?

Our policies cover only commercial properties.

B. What risks are you covering?

If you can get a permit to do it, you can insure it. All of the risks, such as fines, penalties, punitive damages, non-compliance lawsuits, value impairment, can be covered in some way.

i. What is the scope of coverage for these risks? Maximum coverage, deductible, etc.?

There is a minimum premium which does not really decrease with anything below $1 million in coverage. There have been very few policies written for $500,000 in coverage, but most brokers do not want to deal with anything less than $1 million.

ii. What are the underwriting criteria for covering these risks?

No answer.

iii. What is the demand trend for insuring these risks?

I do not have a specific percentage of increase, or date when the increase started, but there have been more inquiries on these insurance policies over the past month than there has been over the past five years. The reason for this has been EPA encouragement of brownfields redevelopment and the Brownfields Program. RBCA standards are making real cleanup feasible for the first time.

iv. How many policies have you sold?

No answer.

v. ***Are the trends different in certain states (i.e., have state laws affected the demand for these policies)?***

No answer.

vi. ***What are the costs (i.e., premiums) for covering these risks?***

A standard premium is not easily identified, but remediation stop-loss is being pushed to under 10 percent of the coverage. Minimum premiums are around $10,000 for a million in coverage.

vii. ***Do the relative costs of covering these risks increase as the value of the insured property decreases? If so, what needs to change for the relative costs to remain constant?***

I do not think $10,000 is a deal-breaker for properties with little value. If the cost of cleanup is upside down, in other words the costs are more than the value of property at its highest use, the deal will not go through anyway.

B. Why aren't [those risks not mentioned] covered under these policies?

No answer.

i. ***What are the significant inhibitors to covering these risks?***

No answer.

ii. ***Do you know of any companies covering these risks?***

No answer.

iii. ***What needs to be changed, by EPA or other parties, to enable the coverage of these risks?***

No answer.

iv. ***What needs to be changed, by EPA or other parties, to lower the cost of covering these risks?***

No answer.

Willis Corroon

C. What would be the estimated amount of time needed to develop and market coverage of these risks, inception-to-market time?

No answer.

D. Do you know of any other companies developing or selling these policies?

The big companies offering these policies are Environmental Warrantee, ECS, Zurich American, and American International Group. These are the leaders in this type of insurance. The others are followers.

III. How can EPA encourage or develop incentives for the use of these types of risk transfer mechanisms?

Policies are not being used because, for many sites, there is no or little information. Second, there is a lack of knowledge about these types of policies in the marketplace. EPA needs to make more information available through literature on these policies and how they work.

COMPANY: Zurich American Insurance Group
INDUSTRY: Insurer

I. Do you have policies in existence or in development?

Yes.

II. What is the coverage of these policies?

A. Do these policies cover commercial or single-family properties?

Our policies cover commercial properties, but they can be geared for single-family properties if requested. However, the answers in this interview are based on commercial property.

B. What risks are you covering?

All of the risks on the list are covered, at least to a certain extent. For example, the coverage of consultant and lawyer fees to meet government regulations is covered to the extent that it is included in legal defense. If one wanted to go beyond compliance, it would not be covered.

i. What is the scope of coverage for these risks? Maximum coverage, deductible, etc.?

The scope of coverage varies widely, up to about $10 million in risk transfer capacity. I can not give a definite range for the coverage, but I have seen it as low as $500,000, with the most commonly requested coverage at $1 million. However, there really is no set minimum except for the fact that as the coverage amount decreases, the cost per dollar covered increases. The deductible is really only a tool that makes sure the insured is taking part of the risk, which will then vary on the soundness of the business deal.

ii. What are the underwriting criteria for covering these risks?

We look first for a detailed engineering report of the site. The key underwriting criteria, however, is to look at the soundness and business sense of the property transaction. What are the fundamentals of the project, and is its proposed use going to cover the costs of remediation, enough to be profitable.

iii. What is the demand trend for insuring these risks?

The demand is greatly increasing. The talk and focus by EPA, states, and localities has been a big help in driving up this demand, as well as the time and energy spent by Zurich American promoting our policies. Specifically, the increase in demand has only been in the form of inquiries, and not in actual policies sold.

iv. How many policies have you sold?

We have been involved in several hundred commercial real estate deals over the past 3 years.

v. Are the trends different in certain states (i.e., have state laws affected the demand for these policies)?

We have not sold enough policies across all states to make an informed answer to this question. I do think that there are a number of states in the Midwest that have put a substantial effort into their brownfields programs.

vi. What are the costs (i.e., premiums) for covering these risks?

The costs vary widely. I cannot give a definite range, but I have seen some policies go for $10,000 or less per million of coverage, while some other policies have gone for a few million. There are too many variable to give a range or average.

vii. Do the relative costs of covering these risks increase as the value of the insured property decreases? If so, what needs to change for the relative costs to remain constant?

There are properties where the cost of remediation, or the risks of these costs, can far exceed the potential value of the property. However, insurance is not going to help redevelop these properties. These properties can only be redeveloped if the redevelopment makes sound business sense. If it does not, insurance will not be provided. These properties will only be redeveloped if subsidies are provided by the government, or if they are redeveloped directly by the government. For most properties that do make good business sense, the cost of insurance has not been an issue.

B. Why aren't [those risks not mentioned] covered under these policies?

There really are no risks that cannot be covered. There are only limits to most of these risks, such as some types of contamination that will not be covered, as well as some properties that have certain manufacturing histories.

i. What are the significant inhibitors to covering these risks?

No answer.

ii. Do you know of any companies covering these risks?

No answer.

iii. What needs to be changed, by EPA or other parties, to enable the coverage of these risks?

No answer.

iv. What needs to be changed, by EPA or other parties, to lower the cost of covering these risks?

No answer.

C. What would be the estimated amount of time needed to develop and market coverage of these risks, inception-to-market time?

Development can be about as fast as we want it to be. If the deal is right, and the demand for coverage is there, the time-frame can be quite short.

D. Do you know of any other companies developing or selling these policies?

No answer.

III. How can EPA encourage or develop incentives for the use of these types of risk transfer mechanisms?

- There is talk and movement currently on secured creditor exemptions for liability. There needs to be this same type of exemption for insurance companies who could potentially be considered owner/operators of properties, and thus could be held liable for costs they were not responsible for initially. There are several cases out there right now which deal with these issues (i.e., Tiger vs. Tiger).

- EPA needs to educate the public, developers, lenders, and purchasers on why and how this redevelopment process happens. By shedding light on problems, frivolous litigation can be averted. These groups need to have a clear picture from EPA on the evaluation of property, and the liability that exists, both state and Federal, even if a property has been closed. From this understanding, EPA needs to make it clear why redeveloping potentially contaminated properties is a priority, ways this is being done now, and how other mechanisms can be used in the future to facilitate redevelopment (such as insurance).

- Clarify the goals of Federal programs, such as Brownfields, and build a legal framework into these goals. For example, when EPA is required to “re-open” a closed property, loan funds should be provided for the additional costs.