TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE G: WASTE DISPOSAL CHAPTER I: POLLUTION CONTROL BOARD SUBCHAPTER h: ILLINOIS "SUPERFUND" PROGRAM

PART 750 ILLINOIS HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN

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AUTHORITY: Implementing and authorized by Section 22.7 of the Environmental Protection Act (Ill. Rev. Stat. 1984 Supp., ch. 111 1/2, par. 1022.7).

SOURCE: Adopted at 8 Ill. Reg. 13199, effective July 16, 1984; amended at 9 Ill. Reg. 10250, effective June 24, 1985.

SUBPART A: INTRODUCTION

Section 750.101 Purpose and Objectives

The purpose of the Illinois Hazardous Substances Pollution Contingency Plan [Plan] is to effectuate the response powers and responsibilities of State authorities for the taking of preventive or corrective action, pursuant to Act, that is necessary or appropriate whenever there is a release or a substantial threat of a release of a hazardous substance.

Section 750.102 Authority

- a) The Plan is required by Section 22.1 of the Environmental Protection Act [Act] (Ill. Rev. Stat. 1983 ch. 111 1/2, par. 1022.1).
- b) Amendments shall be proved to the Illinois Emergency Services and Disaster Agency (IESDA) and the Illinois Department of Nuclear Safety (IDNS) for the comment prior to final adoption by the Board in order to avoid inconsistent or duplicative requirements in the emergency planning responsibilities of those agencies.

Section 750.103 Scope

- a) The plan applies to all State agencies and is in effect for releases or substantial threats of releases of hazardous substances into the environment, and releases or substantial threats of releases of pollutants or contaminants which may present an imminent and substantial danger to public health or welfare.
- b) The Plan provides for response to releases of hazardous substances, pollutants and contaminants in accordance with the authority of the Environmental Proctection Act. It provides for:
 - 1) Division and specification of responsibilities among the State agencies in response actions, and appropriate roles for private entities and local governments;
 - 2) Procedures for undertaking response operations taken pursuant to the Environmental Protection Act;
 - 3) State policies and procedures for the use of dispersants and other chemicals in removal and response actions.

Section 750.104 Application

The Plan is applicable to State response taken at sites which are not the subject of a federal response taken pursuant to CERCLA.

Section 750.105 Definitions

Terms not defined in this section have the meaning given by the Act and Board regulations unless otherwise defined by CERCLA.

"ACT" means the Environmental Protection Act. (Ill. Rev. Stat. 1983 ch. 111 1/2, par. 1022.)

"BOARD" means the Illinois Pollution Control Board.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. 9601 et seq.).

"Claim" means a demand in writing for a sum certain.

"Claimant" means any person who presents a claim for compensation under Section 22.2 of the Act.

"Director" means the Director of the Illinois Environmental Protection Agency.

"Drinking water supply" means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act of 1974, as amended (42 U.S.C. 300 et seq.), or as drinking water by one or more individuals.

"Environment" means any surface water, ground water, drinking supply, land surface and subsurface strata, or ambient air within the State or under the jurisdiction of the State.

"Facility" means:

Any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft; or

Any site or area where a hazardous substance has been deposited, stored, disposed of or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.

"Federally permitted release" means:

Discharges in compliance with a permit under Section 402 of the

Federal Water Pollution Control Act, as amended (33 U.S.C. 466 et seq.);

Discharges resulting from circumstances identified and reviewed and made part of the public record with respect to a permit issued or modified under Section 402 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 466 et seq.) and subject to a condition of such permit;

Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under Section 402 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 466 et seq.), which are caused by events occurring within the scope of relevant operating or treatment systems;

Discharges in compliance with a legally enforceable permit under Section 404 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 466 et seq.);

Releases in compliance with a legally enforceable final permit issued pursuant to Section 3005 (a) through (d) of the Solid Waste Disposal Act, as amended (42 U.S.C. 6901 et seq.) from a hazardous waste treatment, storage, or disposal facility when such permit specifically identifies the hazardous substances and makes such substances subject to a standard of practice, control procedure or bioassay limitation or condition, or other control on the hazardous substances in such releases;

Any release in compliance with a legally enforceable permit issued under Section 102 or Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (33 U.S.C. 1445 et seq.);

Any injection of fluids authorized under Federal underground injection control programs or State programs submitted for Federal approval (and not disapproved by the Administrator of EPA) pursuant to part C of the Safe Drinking Water Act, as amended (42 U.S.C. 300 et seq.);

Any emission into the air subject to a permit or control regulation under Section 111, Section 112, Title 1 Part C or Title 1 Part D of the Clean Air Act, as amended (42 U.S.C. 1857 et seq.) or State implementation plans submitted in accordance with Section 110 of the Clean Air Act, as amended (42 U.S.C. 1857 et seq.) (and not disapproved by the Administrator of EPA), including any schedule or waiver granted, promulgated, or approved under these sections; Any injection of fluids or other materials authorized under applicable State law:

For the purpose of stimulating or treating wells for the production of crude oil, natural gas, or water;

For the purpose of secondary, tertiary, or other enhanced recovery of crude oil or natural gas; or

Which are brought to the surface in conjunction with the production of crude oil or natural gas and which are reinjected.

The introduction of any pollutant into a publicly-owned treatment works when such pollutant is specified in and in compliance with applicable pretreatment standards of Section 307 (b) or (c) of the Clean Water Act, as amended (33 U.S.C. 466 et seq.) and enforceable requirements in a pretreatment program submitted by a State or municipality for Federal approval under Section 402 of such Act; and

Any release of source, special nuclear, or by-product material, as those terms are defined in the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), in compliance with a legally enforceable license, permit, regulation, or order issue pursuant to the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.).

"Fund" means the Hazardous Waste Fund established by Section 22.2 of the Act.

"Groundwater" means water in a saturated zone or stratum beneath the surface of land or water.

"Hazardous substance" means:

Any substance designated pursuant to Section 311(b) (2)(A) of the Clean Water Act, as amended (33 U.S.C. 466 et seq.);

Any element, compound, mixture, solution, or substance designated pursuant to Section 102 of CERCLA, as amended (42 U.S.C. 9601 et seq.);

Any hazardous waste;

Any toxic pollutant listed under Section 307(a) of the Clean Water Act, as amended (33 U.S.C. 466 et seq.);

Any hazardous air pollutant listed under Section 112 of the Clean Air Act, as amended (42 U.S.C. 1857 et seq.); and

Any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to Section 7 of the Toxic Substances Control Act, as amended (15 U.S.C. 2601 et seq.). The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under this definition and the term does not include natural gas, natural gas liquids, liquified natural gas or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

"IDL" means the Illinois Department of Labor.

"IDNS" means the Illinois Department of Nuclear Safety.

"IEPA" means the Illinois Environmental Protection Agency.

"IESDA" means the Illinois Emergency Services and Disaster Agency.

"Inland zone" means the environment inland of the coastal zone.

"Local Government" means a "unit of local government" as defined in Article VII of the Constitution of the State of Illinois, that is, counties, municipalities, townships, special districts, and units, designated as units of local government by law, which exercise limited governmental powers or powers in respect to limited governmental subjects, but does not include school districts.

"Natural Resources" means land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of fishery conservation zones established by the Fishery Conservation and Management Act of 1976, as amended (16 U.S.C. 1801 et seq.), the State of Illinois, or any State or local government or any foreign government.

"Offshore facility" means any facility which is subject to the jurisdiction of the State and is located in, on or under water, other than a vessel or a public vessel.

"Onshore facility" means any facility (including, but not limited to motor

vehicles and rolling stock) located in, on, or under any land or nonnavigable waters within the State.

"Person" means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, U.S. Government, state, municipality, commission, political subdivision of a state, or any interstate body.

"Plan" means the Illinois Hazardous Substances Pollution Contingency Plan.

"Pollutant or contaminant" shall include, but not be limited to, any element, substance, compound, or mixture, including disease causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingesting through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformation, in such organisms or their offsprings. The term does not include petroleum, including crude oil and any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Section 101 (14)(A) through (F) of CERCLA, as amended (42 U.S.C. 9601 et seq.), nor does it include natural gas, liquified natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and synthetic gas).

"Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, but excludes:

> Any release which results in exposure to person solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons;

Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine;

Release of source, by-product or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under Section 170 of such Act; and

The normal application of fertilizer. For the purposes of this Plan, release also means substantial threat of a release.

"Remove" or "Removal" means the clean-up or removal of released hazardous substances from the environment; such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment; such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances; the disposal of removed material; or the taking or such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or the environment, which may otherwise result from such release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals, and any emergency assistance which may be provided under the Illinois Emergency Services and Disaster Agency Act of 1975, as amended (Ill. Rev. Stat. 1983, ch. 127, pars. 1101 et seq.) or any other law.

"Remedy" or "Remedial Action" means those actions consistent with permanent remedy taken instead of, or in addition to, removal action in the event of a release or threatened released of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, clean-up of released hazardous substances or contaminated materials, recycling or reuse, diversion destruction, segregation or reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, onsite treatment or incineration, provision of alternative water supplies, and any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment. The term includes the costs of permanent relocation of residents and businesses and community facilities where the Governor and the Director determine that, alone or in combination with other measures, such relocation is more cost-effective than and environmentally preferable to the transportation, storage treatment, destruction, or secure disposition off-site of hazardous substances or may otherwise be necessary to protect the public health or welfare. The term does not include off-site transport of hazardous substances, or the storage, treatment, destruction, or secure disposition offsite of such hazardous substances or contaminated materials unless the Governor and the Director determine that such actions:

Are more cost-effective than other remedial actions;

Will create new capacity to manage hazardous substances in

addition to those located at the affected facility; or

Are necessary to protect public health or welfare or the environment from a present or potential risk which may be created by further exposure to the continued presence of such substances or materials.

"Respond" or "Response" means remove, removal, remedy, or remedial action.

"State" means the State of Illinois.

"State Permitted Releases" means releases permitted under the Act or Board regulations or pursuant to a legally enforceable State permit.

"United States" means the several states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of the Northern Marianas and any other territory or possession over which the U.S. has jurisdiction.

"Volunteer" means any individual accepted to perform services by a State agency which has authority to accept volunteer services. A volunteer is subject to the provisions of the authorizing statute, and of this Plan.

SUBPART B: RESPONSIBILITY

Section 750.201 Coordination Among and by State Agencies

- a) IEPA should coordinate planning and response action with affected State and Federal agencies and local government and private entities.
- b) State agencies with facilities or other resources which may be useful in a State response situation should make those facilities or resources available consistent with agency capabilities and authorities.
- c) When the Director of the IEPA determines that there may be an imminent and substantial endangerment to the public health or welfare or the environment because of a release or threatened release of a hazardous substance, from a facility, he/she may request the Illinois Attorney General to secure the relief necessary to abate the threat. The action described here is in addition to any actions taken by a Federal agency or local government for the same purpose.

d) Where appropriate, discharges of radioactive materials shall be handled pursuant to the appropriate State and/ or federal radiological plans.

Section 750.202 Other Assistance by State Agencies

- a) State agencies' other than IEPA, which have duties established by statute or executive order which may be relevant to State response action or may be relevant to the rehabilitation, restoration, and replacement of damaged or lost natural resources may be called upon by IEPA during the planning or implementation of a response to provide assistance in their respective areas of expertise, consistent with their capabilities and legal authorities.
- b) In addition to their general responsibilities under subsection (a) of this Section, State agencies should:
 - 1) Make necessary information available to the IEPA; and
 - 2) Inform the IEPA of changes in the availability of resources that would affect the operations of the Plan.
- c) All State agencies are responsible for reporting to IESDA releases of hazardous substances from facilities or vessels which are under their jurisdiction or control in accordance with Subpart D of this Plan. IESDA, in turn, shall notify IEPA of such reports.

Section 750.203 Local Participation

Local government agencies are encouraged to include contingency planning for response consistent with this Plan in all emergency and disaster planning.

Section 750.204 Non-Government Participation

- a) Industry groups, academic organizations, and others are encouraged to commit resources for response operations.
- b) It is particularly important to use the valuable technical and scientific information generated by the non-government local community along with those from Federal and State government to assist the IEPA in devising clean-up strategies where effective standard techniques are unavailable, and to ensure that pertinent research will be undertaken to meet national needs.
- c) IEPA should establish procedures to allow for well-organized, worthwhile, and safe use of volunteers. These procedures should provide for the direction of volunteers by the IEPA or by other State or local officials knowledgeable in contingency operations and capable of

providing leadership. IEPA also should identify specific areas in which volunteers can be used, such as beach surveillance, logistical support, and bird and wildlife treatment. Unless specifically requested by the IEPA volunteers generally should not be used for physical removal or remedial activities. If, in the judgment of the IEPA dangerous conditions exist, volunteers shall be restricted from on-scene operations.

d) If any person other than a person operating under contract or cooperative agreement with the IEPA takes response action and intends to seek reimbursement from the Fund, such actions must be in conformity with this Plan, and may only be undertaken if such person notifies the Director of IEPA or his/her designee prior to taking such action, receives prior approval to take such action, and acts by and under the direction of IEPA.

SUBPART C: ORGANIZATION

Section 750.301 Response Operations

- a) The IEPA shall direct State Fund-financed response efforts and coordinate all other State efforts at the scene of a discharge or release.
- b) The IEPA shall, to the extent practicable under the circumstances, collect pertinent facts about the discharge or release, such as its source and cause; the existence of potentially responsible parties, the nature, amount, and location of discharged or released materials; the probable direction and time of travel of discharged or released materials; the pathways to human exposure; potential impact on human health, welfare and safety; the potential impact on natural resources and property which may be affected; priorities for protecting human health, welfare and the environment; and appropriate cost documentation.

Section 750.302 Emergency Response Unit

IEPA shall maintain an Emergency Response Unit with the following capabilities:

- a) Specialized containment and removal equipment;
- b) Personnel trained to evaluate, monitor and supervise pollution responses;
- c) "Initial Aid" response capability to deploy equipment prior to the arrival of a clean-up contractor or other response personnel;
- d) Access to special decontamination equipment for chemical releases;

- e) An up-to-date inventory as to the location of response and support equipment, including private and commercial equipment as well as government resources;
- Advice on hazard evaluation, risk assessment; multi-media sampling and analysis program; on-site safety; clean-up technique and priorities; water supply decontamination and protection; application of dispersants; environmental assessments; degree of clean-up required; and disposal of contaminated material;
- g) Expertise in biology, chemistry, hydrology, geology and engineering.

Section 750.303 Public Information Assistance

IEPA shall provide a means to meet the demand for public information and participation during major responses.

Section 750.304 Communications

- a) Notice of a release of a hazardous substance in an amount equal to or greater than the reportable quantity shall be made at the earliest practicable moment following discovery of the incident or accident pursuant to the procedures in the IESDA rules for telephone notification (29 Ill. Adm. Code 430).
- b) The IESDA notification telephone number is 217/782-7860.

SUBPART D: HAZARDOUS SUBSTANCE RESPONSE

Section 750.401 General

- a) This subpart establishes methods and criteria for determining the appropriate extent of response when any hazardous substance is released or there is a substantial threat of such a release into the environment, of any pollutant or contaminant which may present an imminent and substantial danger to the public health or welfare.
- b) Removal or remedial action is authorized unless it is determined that such removal or remedial action will be done properly by the owner or operator of the vessel or facility from which the release or threat of release emanates, or by any other responsible party.
- c) In determining the need for and in planning or undertaking Fund-financed action, response personnel should, to the extent practicable, consider the following:

- 1) Conserve Fund monies by encouraging private party clean-up;
- 2) Be sensitive to local community concerns (in accordance with applicable guidance);
- 3) Rely on established technology when feasible and cost-effective;
- 4) Encourage the participation and sharing of technology by industry and other experts.

Section 750.410 Phase I--Discovery or Notification Assessment

- a) A release may be discovered through:
 - 1) Notification pursuant to a statutory requirement;
 - 2) Investigation by government authorities;
 - 3) Notification of a release by a Federal or State permit holder when required by its permit;
 - 4) Inventory efforts or random or incidental observation by government agencies or the public;
 - 5) Other sources.
- b) If not reported previously, a release should be promptly reported to IESDA at telephone number 217/782-7860. Any person in charge of a vessel or facility should immediately notify IESDA as soon as he has knowledge of a release (other than a State or federally permitted release) of a hazardous substance from such vessel or facility in the amount equal to a greater than the reportable quantity determined pursuant to Section 102(b) of CERCLA, as amended (42 U.S.C. 9601 et seq.). IESDA shall convey the notification expeditiously to IEPA and other appropriate government agencies.

(Source: Amended at 9 Ill. Reg. 10250, effective June 24, 1985)

Section 750.420 Phase II--Preliminary Assessment

a) A preliminary assessment of a release identified for possible State response should be undertaken by the IEPA. If the reported release potentially requires immediate removal, the preliminary assessment should be done as promptly as possible. Other releases shall be assessed as soon as practicable. The IEPA should base its assessment on readily available information. This assessment may include:

- 1) Evaluation of the magnitude of the hazard;
- 2) Identification of the source and nature of the release;
- 3) Determination of the existence of a non-State party or parties ready, willing, and able to undertake a proper response; and
- 4) Evaluation of factors necessary to make the determination of whether immediate removal is necessary.
- b) A preliminary assessment of releases from hazardous waste management facilities may include collection or review of data such as site management practices, information from generators, photographs, analysis of historical photographs, literature searches, and person interviews conducted as appropriate. In addition, a perimeter (off-site) inspection may be necessary to determine the potential for release. Finally, if more information is needed, a site visit may be performed, if conditions are such that it may be performed safely.
- c) A preliminary assessment should be terminated when the IEPA determines:
 - 1) There is no release;
 - 2) The source is neither a vessel nor a facility;
 - 3) The release involves neither a hazardous substance, nor a pollutant or contaminant that may pose an imminent and substantial danger to public health or welfare;
 - 4) The amount released does not warrant State response;
 - 5) A party responsible for the release, or any other person, is providing appropriate response, and on-scene monitoring by the government is not recommended or approved by the IEPA; or
 - 6) The assessment is completed.

Section 750.430 Phase III--Immediate Removal

a) In determining the appropriate extent of action to be taken at a given release, the IEPA shall first review the preliminary assessment to determine if immediate removal action is appropriate. Immediate removal action shall be deemed appropriate in those cases in which the IEPA determines that the initiation of immediate removal action will prevent or mitigate immediate and significant risk of harm to human life or health or to the environment from such situations as:

- 1) Human, animal, or food chain exposure to acutely toxic substances;
- 2) Contamination of a drinking water supply;
- 3) Fire and/or explosion; or
- 4) Similarly acute situations.
- b) If the IEPA determines that immediate removal is appropriate, defensive actions should begin as soon as possible to prevent or mitigate danger to the public health, welfare, or the environment. Actions may include, but are not limited to:
 - 1) Collecting and analyzing samples to determine the source and dispersion of the hazardous substance and documenting those samples for possible evidentiary use;
 - 2) Providing alternative water supplies;
 - 3) Installing security fencing or other measures to limit access;
 - 4) Controlling the source of release;
 - 5) Measuring and sampling;
 - 6) Moving hazardous substances off-site for storage, destruction, treatment, or disposal provided that the substances are moved to a facility that is in compliance with Subtitle G of the Board's regulations (35 Ill. Adm. Code 700: Subtitle G, Chapter I) or Subtitle C of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended (42 U.S.C. 6901 et seq.);
 - 7) Placing physical barriers to deter the spread of the release;
 - 8) Controlling the water discharge from an up-stream impoundment;
 - 9) Recommending to appropriate authorities the evacuation of threatened individuals;
 - 10) Using chemicals and other materials in accordance with Subpart E to restrain the spread of the substance and to mitigate its effects;

- 11) Executing damage control or salvage operations.
- c) Immediate removal actions are complete when, in the opinion of IEPA the criteria in subsection (a) of this Section are no longer met and any contaminated waste materials transported off-site have been treated or disposed of properly.
- d) Immediate removal action shall be terminated after \$1 million has been obligated for the action or six months have elapsed from the date of initial response to a release or threatened release unless it is determined that:
 - 1) Continued response actions are immediately required to prevent, limit or mitigate an emergency;
 - 2) There is an immediate risk to public health or welfare or the environment; and
 - 3) Such assistance will not otherwise be provided on a timely basis.
- e) If the IEPA determines that the releases still may require planned removal or remedial action, the IEPA may initiate, either simultaneously or sequentially, Phase IV or V as appropriate.

Section 750.440 Phase IV--Evaluation and Determination of Appropriate Response--Planned Removal and Remedial Action

- a) The purpose of this phase is to determine the appropriate action when the preliminary assessment indicates that further response may be necessary or when IEPA finds that further response should follow an immediate removal action.
- b) As soon as practicable, an inspection will be under-taken to assess the nature and extent of the release and to assist in determining its priority for Fund-financed response.
- c)
- 1) The IEPA may undertake investigations, monitoring, surveys, testing and other information gathering as appropriate. These efforts shall be undertaken jointly by the IEPA and those state officials responsible for enforcing legal requirements.
- 2) A major objective of an inspection is to determine if there is any immediate danger to persons living or working near the facility. In general, the collection of samples should be minimized during

inspection activities; however, situations in which there is an apparent risk to the public should be treated as exceptions to that practice. Examples of apparent risk include use of nearby wells for drinking water, citizen complaints of unusual taste or odor in drinking water, or chemical odors or unusual health problems in the vicinity of the release. Under those circumstances, a sampling protocol should be developed for the inspection to allow for the earliest possible detection of any human exposure to hazardous substances. The site inspection may also address:

- A) Determining the need for immediate removal action;
- B) Assessing amounts, types and location of hazardous substances stored;
- C) Assessing potential for substances to migrate from areas where they were originally located;
- D) Determining or documenting immediate threats to the public or environment.
- d) Methods for Establishing Priorities
 - IEPA shall prepare a State Priorities List. Such list shall be compiled using the Federal Hazard Waste Ranking System (40 CFR 300, Appendix A, as amended.)
 - 2) Ranking of Releases--Similar hazard ranking scores assigned to releases cannot accurately differentiate among risks represented by the releases. Thus, in order to avoid misleading the public that real differences in risk exist, similar scores may be grouped on the State Priorities List.
 - 3) IEPA shall publish a proposed State Priorities List in the Illinois Register for public comment.
 - 4) IEPA shall revise and publish the State Priorities List at least once annually. In addition, revisions shall give notice of the deletion (if any) of releases previously listed.

Section 750.450 Phase V--Planned Removal

a) Planned removal may be undertaken pursuant to a contract or cooperative agreement when the IEPA determines that:

- There would be a substantial cost savings by continuing a response action with the equipment and resources mobilized for an immediate removal action taken pursuant to Section 750.420, but terminated pursuant to Section 750.420(c); or
- 2) The public and/or environment will be at risk from exposure to hazardous substances if response is delayed at a release not on the State Priorities List.
- b) Among the factors that IEPA will use to determine whether a planned removal is appropriate under Section 750.450(a)(2) are the following:
 - 1) Actual or potential direct contact with hazardous substances by nearby population;
 - 2) Contaminated drinking water at the tap;
 - 3) Hazardous substances in drums, barrels, tanks, or other bulk storage containers, that are known to pose a serious threat to public health or the environment;
 - 4) Highly contaminated soils largely at or near surface, posing a serious threat to public health or the environment;
 - 5) Serious threat of fire or explosion; or
 - 6) Weather conditions that may cause substances to migrate and pose a serious threat to public health or the environment.
- c) Planned removal actions shall be terminated when the IEPA determines that the risk to the public health or the environment has been abated. In making this determination, the IEPA shall consider whether the factors listed in Section 750.440(c) continue to apply to the release and whether any contaminated waste materials transported off-site have been treated or disposed of properly.
- d) Obligations from the Fund shall not continue after \$1 million has been obligated for response actions or six months has elapsed from the date of initial response to the release, unless the IEPA finds that:
 - 1) continued response actions are immediately required to prevent, limit or mitigate an emergency;
 - 2) there is an immediate risk to public health or welfare or the environment; and

3) such assistance will not otherwise be provided on a timely basis.

Section 750.460 Phase VI--Remedial Action--General

- a) Remedial actions taken pursuant to this section are those responses to releases on the State Priorities List that are consistent with permanent remedy to prevent or mitigate the migration of a release of hazardous substances into the environment.
- b) As an alternative or in addition to Fund-financed remedial action, the IEPA may seek, through voluntary agreement or administrative or judical process, to have those persons responsible for the release clean up in a manner that effectively mitigates and minimizes damage to, and provides adequate protection of, public health, welfare, and the environment. The IEPA shall evaluate the adequacy of clean-up proposals submitted by responsible parties or determine the level of clean-up to be sought through enforcement efforts, by consideration of factors discussed in Sections 750.462 through 750.469. The IEPA will not, however, apply the cost balancing considerations discussed in Section 750.469(b) to determine the appropriate extent of responsible party clean-up.

Section 750.461 Phase VI--Remedial Action--Funding Requests

- a) The IEPA will examine available information and determine, based on the factors in Section 750.466 of this section, the type or types of remedial response that may be needed to remedy the release. This scoping will serve as the basis for requesting funding for a remedial investigation and feasibility study:
 - 1) In the case of initial remedial measures, a single request may be made by IEPA for funding the remedial investigation, feasibility study, design and implementation, in order that such measures may be expedited while continuing the remainder of the remedial planning process;
 - 2) In the case of source control or off-site remedial action, the initial funding request should be for the remedial investigation and feasibility study. Request for funding of design and implementation should be made after the completion of the feasibility study.
- b) As a remedial investigation progresses, the project may be modified if the IEPA determines that, based on the factors in subsection (d), such modifications would be appropriate.

Section 750.462 Phase VI--Remedial Action--Initial Remedial Action

In some instances, initial remedial measures can and should begin before final selection of an appropriate remedial action if such measures are determined to be feasible and necessary to limit exposure or threat of exposure to a significant health or environmental hazard and if such measures are cost-effective. Compliance with Section 750.450(b) is a prerequisite to taking initial remedial measures. The following factors should be used in determining whether initial remedial measures are appropriate:

- a) Actual or potential direct contact with hazardous substances by nearby population. (Measures might include fences and other security precautions.)
- b) Absence of an effective drainage control system (with an emphasis on runon control). (Measures might include drainage ditches.)
- c) Contaminated drinking water at the tap. (Measures might include the temporary provision of an alternative water supply.)
- d) Hazardous substances in drums, barrels, tanks, or other bulk storage containers above surface posing a serious threat to public health or the environment. (Measures might include transport of drums off-site.)
- e) Highly contaminated soils largely at or near surface, posing a serious threat to public health or the environment. (Measures might include temporary capping or removal of highly contaminated soils from drainage areas.)
- f) Serious threat of fire or explosion or other serious threat to public health or the environment. (Measures might include stabilization of berms, dikes or impoundments.)
- g) Weather conditions that may cause substances to migrate and to pose a serious threat to public health or the environment. (Measures might include stabilization of berms, dikes or impoundments.)

Section 750.463 Phase VI--Remedial Action--Source Control Remedial Action

Source control remedial actions may be appropriate if a substantial concentration of hazardous substances remain at or near the area where they were originally located and inadequate barriers exist to retard migration of substances into the environment. Source control remedial actions may not be appropriate if most substances have migrated from the area where originally located or if the IEPA determines that the substances are adequately contained. Source control remedial actions may include alternative to contain the eliminate potential contamination by transporting the hazardous substances to a new

location. The following criteria should be assessed determining whether and what type of source control remedial actions should be considered:

- a) The extent to which substances pose a danger to public health, welfare, or the environment. Factors which should be considered in assessing this danger include:
 - 1) Population at risk;
 - 2) Amount and form of the substance present;
 - 3) Hazardous properties of the substances;
 - 4) Hydrogeological factors (e.g. soil permeability depth to saturated zone, hydrologic gradients, proximity to a drinking water aquifer); and
 - 5) Climate (rainfall, etc).
- b) The extent to which substances have migrated or are contained by either natural or man-made barriers.
- c) The experiences and approaches used in similar situations by State and Federal agencies, other states, and private parties.
- d) Environmental effects and welfare concerns.

Section 750.464 Phase VI--Remedial Action--Off-Site Remedial Action

In some situations it may be appropriate to take action (referred to as off-site remedial actions) to minimize and mitigate the migration of hazardous substances and the effects of such migration. Theses actions may be taken when the IEPA determines that source control remedial actions may not effectively mitigate and minimize the threat and there is a significant threat to public health, welfare, or the environment. These situations typically will result from contamination that has migrated beyond the area where the hazardous substances were originally located. Off-site measures may include provision of permanent alternative water supplies, management of a drinking water aquifer plume or treatment of drinking water aquifers. The following criteria should be used in determining whether and what type of off-site remedial actions should be considered:

- a) Contribution of the contamination to an air, land or water pollution problem;
- b) The extent to which the substances have migrated or are expected to migrate from the area of their original location and whether continued migration may pose a danger to public health, welfare or environment;

- c) The extent to which natural or man-made barriers currently contain the hazardous substances and the adequacy of the barriers;
- d) The factors listed in Section 750.463(a);
- e) The experiences and approaches used in similar situations by State and Federal agencies, other states, and private parties;
- f) Environmental effects and welfare concerns.

Section 750.465 Phase VI--Remedial Action--Remedial Investigation

A remedial investigation should be undertaken by the IEPA (or responsible party if the responsible party will be developing a clean-up proposal) to determine the nature and extent of the problem presented by the release. This includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for and proposed extent of remedial action. During the remedial investigation, the original scoping of the project may be modified based on the factors in Sections 750.462-750.464. Part of the remedial investigation involves assessing whether the threat can be mitigated and minimized by controlling the source of the contamination at or near the area where the hazardous substances were originally located (source control remedial actions) or whether additional actions will be necessary because the hazardous substances have migrated from the area of their original location (off-site remedial actions).

Section 750.466 Phase VI--Remedial Action--Development of Alternatives

Development of Alternatives. A limited number of alternatives should be developed for either source control or off-site remedial actions (or both) depending upon the type of response that has been identified under Sections 750.462-750.465 as being appropriate. One alternative may be a no-action alternative. No-action alternatives are appropriate, for example, when response action may cause a greater environmental or health danger than no action. These alternatives should be developed based upon the assessment conducted under Sections 750.462-750.465 and reflect the types of source control or off-site remedial actions determined to be appropriate under Sections 750.462-750.465.

Section 750.467 Phase VI--Remedial Action--Initial Screening of Alternatives

Initial Screening of Alternatives. The alternatives developed under Section 750.466 will be subjected to an initial screening to narrow the list of potential remedial actions for further detailed analysis. Three broad criteria should be used in the initial screening of alternatives:

a) Cost. For each alternative, the cost of installing or implementing the remedial action must be considered, including operation and maintenance

costs. An alternative that far exceeds (e.g. by an order of magnitude) the costs of other alternatives evaluated and that does not provide substantially greater public health or environmental benefit should usually be excluded from further consideration.

- b) Effects of the Alternative:
 - 1) The effects of each alternative should be evaluated in two ways:
 - A) Whether the alternative itself or its implementation has any adverse environmental effects; and
 - B) For source control remedial actions, whether the alternative is likely to achieve adequate control of source material, or for offsite remedial actions, whether the alternative is likely to effectively mitigate and minimize the threat of harm to public health, welfare or the environment.
 - 2) If an alternative has significant adverse effects, it should be excluded from further consideration. Only those alternatives that effectively contribute to protection of public health, welfare, or the environment should be considered further.
- c) Acceptable Engineering Practices. Alternatives must be feasible for the location and conditions of the release, applicable to the problem, and represent a reliable means of addressing the problem.

Section 750.468 Phase VI--Remedial Action--Detailed Analysis of Alternatives

- a) A more detailed evaluation will be conducted of the limited number of alternatives that remain after the initial screening in Section 750.467;
- b) The detailed analysis of each alternative should include:
 - 1) Refinement and specification of alternatives in detail, with emphasis on use of established technology;
 - 2) Detailed cost estimation, including distribution of costs over time;
 - 3) Evaluation in terms of engineering implementation, or constructability;
 - 4) An assessment of each alternative in terms of the extent to which it is expected to effectively mitigate and minimize damage to, and provide adequate protection of, public health, welfare, and the environment, relative to the other alternatives analyzed; and

- 5) An analysis of any adverse environmental impacts, methods for mitigating these impacts, and costs of mitigation.
- c) In performing the detailed analysis of alternatives, it may be necessary to gather additional data in order to complete the analysis.

Section 750.469 Phase VI--Remedial Action--Extent of Remedy

- a) The appropriate extent of remedy shall be determined by the IEPA's selection of the remedial alternative which it determines is cost-effective (i.e. the lowest cost alternative that is technologically feasible and reliable and which effectively mitigates and minimizes damage to and provides adequate protection of public health, welfare, or the environment).
- b) The need for protection of public health, welfare and the environment at the facility under consideration should be balanced against the amount of money available in the Fund to respond to other sites which present or may present a threat to public health or welfare or the environment, taking into consideration the need for immediate action. Accordingly, in determining the appropriate extent of remedy for Fund-financed response, the IEPA also must consider the need to respond to other releases with Fund monies.

Section 750.470 Phase VII--Documentation and Cost Recovery

During all phases, documentation shall be collected and maintained to support all actions taken under this Plan, and to form the basis for cost recovery. In general, documentation should be sufficient to provide the source and circumstances of the condition, the identity of responsible parties, accurate accounting of State costs incurred, and impacts and potential impacts to the public health, welfare and environment.

Section 750.480 Engineering Methods for On-Site Actions-- Air Emissions Controls

The control of volatile gaseous compounds should address both lateral movement and atmospheric emissions. Before gas migration controls can be properly installed, field measurements to determine gas concentrations, pressures, and soil permiabilities should be used to establish optimum design for control. In addition, the types of hazardous substances present, the depth to which they extend, the nature of the gas and the subsurface geology of the release area should, if possible, be determined. Typical emission control techniques include the following:

- a) Pipe vents;
- b) Trench vents;

- c) Gas barriers;
- d) Gas collection systems;
- e) Overpacking.

Section 750.481 Engineering Methods for On-Site Actions--Surface Water Controls

These are remedial techniques designed to reduce waste infiltration and to control runoff at release areas. They also serve to reduce erosion and to stabilize the surface of covered sites. These types of control technologies are usually implemented in conjunction with other types of controls such as the elimination of groundwater infilitration and/or waste stabilization, etc. Technologies applicable to surface water control include the following:

- a) Surface seals;
- b) Surface water diversion and collection systems:
 - 1) Dikes and berms;
 - 2) Ditches, diversions, waterways;
 - 3) Chutes and downpipes;
 - 4) Levees;
 - 5) Seepage basins and ditches;
 - 6) Sedimentation basins and ponds;
 - 7) Terraces and benches.
- c) Grading;
- d) Revegetation.

Section 750.482 Engineering Methods for On-Site Actions-- Groundwater Controls

Groundwater pollution is a particularly serious problem because, once an aquifer has been contaminated, the resource cannot usually be cleaned without the expenditure of great time, effort and resources. Techniques that can be applied to the problem with varying degrees of success are as follows:

- a) Impermeable barriers:
 - 1) Slurry walls;

- 2) Grout curtains;
- 3) Sheet pilings.
- b) Permeable treatment beds;
- c) Groundwater pumping:
 - 1) Water table adjustment;
 - 2) Plume containment.
- d) Leachate control--Leachate control systems are applicable to control of surface seeps and seepage of leachate to groundwater. Leachate collection systems consist of a series of drains which intercept the leachate and channel it to a sump, wetwell, treatment system, or appropriate surface discharge point. Technologies applicable to leachate control include the following:
 - 1) Subsurface drains;
 - 2) Drainage ditches;
 - 3) Liners.

Section 750.483 Engineering Methods for On-Site Actions-- Contaminated Water and Sewer Lines

Sanitary sewers and municipal water mains located down gradient from hazardous waste disposal sites may become contaminated by infiltration of leachate or polluted ground water through cracks, ruptures, or poorly sealed joints in piping. Technologies applicable to the control of such contamination to water and sewer lines include:

- a) Grouting;
- b) Pipe relining and sleeving;
- c) Sewer relocation.

Section 750.484 Engineering Methods for On-Site Actions-- Treatment Technologies--Gaseous Emissions Treatment

Gases from waste disposal sites frequently contain malodorous and toxic substances, and thus require treatment before releases to the atmosphere. There are two basic types of gas treatment systems:

- a) Vapor phase absorption;
- b) Thermal oxidation.

Section 750.485 Engineering Methods for On-Site Actions-- Treatment Technologies--Direct Waste Treatment Methods

In most cases, these techniques can be considered long-term permanent solutions. Many of these direct treatment methods are not fully developed and the applications and process reliability are not well demonstrated. Use of these techniques for waste treatment may require considerable pilot plant work. Technologies applicable to the direct treatment of wastes are:

- a) Biological methods:
 - 1) Treatment via modified conventional wastewater treatment techniques;
 - 2) Anaerobic, aerated and facultative lagoons;
 - 3) Supported growth biological reactors.
- b) Chemical methods:
 - 1) Chlorination;
 - 2) Precipitation, flocculation, sedimentation;
 - 3) Neutralization;
 - 4) Equalization;
 - 5) Chemical oxidation.
- c) Physical methods:
 - 1) Air stripping;
 - 2) Carbon adsorption;
 - 3) Ion exchange;
 - 4) Reverse osmosis;
 - 5) Permeable bed treatment;

- 6) Wet air oxidation;
- 7) Incineration.

Section 750.486 Engineering Methods for On-Site Actions-- Treatment Technologies--Contaminated Soils and Sediments

In some cases where it can be shown to be cost-effective, contaminated sediments and soils will be treated on the site. Technologies available include:

- a) Incineration;
- b) Wet air oxidation;
- c) Solidification;
- d) Encapsulation;
- e) In situ treatment:
 - 1) Solution mining, (soil washing or soil flushing);
 - 2) Neutralization/detoxification;
 - 3) Microbiological degradation.

Section 750.490 Methods for Remedying Releases--Off-Site Transport for Storage, Treatment, Destruction, or Secure Disposition

- a) General--Off-site transport or storage, treatment, destruction, or secure disposition off-site may be provided in cases where IEPA determines that such actions:
 - 1) Are more cost-effective than other forms of remedial actions;
 - 2) Will create new capacity to manage, in compliance with Subtitle G of the Board's regulations (35 III. Adm. Code 700: Subtitle G, Chapter I), hazardous substances in addition to those located at the affected facility; or
 - 3) Are necessary to protect public health, welfare, or the environment from a present or potential risk which may be created by further exposure to the continued presence of such substances or materials.

- b) Contaminated soils and sediments may be removed from the site. Technologies used to remove contaminated sediments on soils include:
 - 1) Excavation;
 - 2) Hydraulic dredging;
 - 3) Mechanical dredging.

Section 750.492 Methods of Remedying Releases--Provision of Alternative Water Supplies

Alternative water supplies can be provided in several ways:

- a) Provision of individual treatment units;
- b) Provision of water distribution system;
- c) Provision of new wells in a new location or deeper wells;
- d) Provision of cisterns;
- e) Provision of bottled or treated water;
- f) Provision of upgraded treatment for existing distribution systems.

Section 750.494 Methods of Remedying Releases--Relocation

Permanent relocation of residents, businesses, and community facilities may be provided where it is determined that human health is in danger and that alone or in combination with other measures, relocation would be cost-effective and environmentally preferable to other remedial response. Temporary relocation may also be taken in appropriate circumstances.

Section 750.496 Worker Health and Safety

IEPA personnel should be aware of hazards, due to a release of hazardous substances, to human health and safety and exercise great caution in allowing civilian or government personnel into an affected area until the nature of the release has been ascertained. Accordingly, IEPA personnel must conform to applicable OSHA requirements, IDL requirements, and other guidance. All private contractors who are working at the scene of a release must conform to applicable provisions of the Occupational Safety and Health Act, IDL requirements, and any other requirements deemed necessary by IEPA.

SUBPART E: USE OF DISPERSANTS AND OTHER CHEMICALS

Section 750.501 General

- a) The IEPA may authorize the use of dispersants and other chemicals on oil spills; provided, however, that such dispersants and other chemicals must be on the list of accepted dispersants prepared by the United States Environmental Protection Agency pursuant to Section 311(c) (2)(G) of the Clean Water Act (33 U.S.C. 466 et seq.), as amended.
- b) In the case of dispersants and other chemicals not included on the list of accepted dispersants, IEPA will authorize use on a case-by-case basis not inconsistent with Federal requirements. Case-by-case approvals will be made by the Director or his designee.