FILE: DUWAMISH SUB

DATE: June 7, 1988

TO: Walt Sickler, Operations

FROM: Lynn Davision, Environmental Affairs/DIVISION, DIRECTOR Original Signed By

SUBJECT: Compliance Audit Conducted for Duwamish Substation

On May 31 staff from EAD, accompanied by Al Weiland, conducted a compliance audit of the Duwamish Substation. We found the overall condition of the substation generally good and have the following specific observations and recommendations:

- Our most critical observation concerns the lack of containment for oil in the event of a spill and the lack of a current Oil Spill Prevention, Countermeasure and Control (SPCC) Plan for the Duwamish Substation. As you are aware, an SPPC plan is required to be onsite and updated regularly for any site storing over 660 gallons of oil in a single container, or a combined storage of 1320 gallons. Duwamish Sub has over 100,000 gallons and is an especially high priority because of the direct discharge of yard drains into the Duwamish River and the absence of containment beneath oil-filled equipment. During the past few months, preliminary data has been gathered by staff from EAD and Civil Engineering. We recommend designating an Operations staff person to be responsible and scheduling a meeting between responsible staff from Operations, Civil Engineering, and EAD, to develop the details of an SPCC Plan.

- We also recommend that a copy of the oil spill response tab of the Emergency Operating Procedures for City Light be located at the substation itself for easy access by employees.

- We found the labeling and storage of hazardous materials in particularly good order. Staff should be commended and we encourage them to keep up the good work.

- It is our understanding that the remaining PCB capacitator bank (824 on Bus D) is scheduled for changeout under the CIP program for September of this year. EAD will sample soils underneath for PCB content prior to the changeout.

- It is also our understanding that efforts to repair oil leaks from transformer banks 77 and 78 will continue. Leaking oil will continue to be collected on the cement pad and gravel by absorbent pads such as those observed during our audit.

A copy of the completed audit form is attached for your review. Please discuss this audit report with appropriate staff in your division, and let us know what response measures you intend to take for each of our recommendations by June 21. If any of the information we have referred to is in error, please send us corrections. Followup comments should be directed to Lynn Helbrecht of my staff at 684-3799. Thank you.

LH:bal
LH:DUWAMISH

Attachment

cc: Macdonald
Fletcher
Schorer
Weiland
Davison
Axelrod
Durrant
Helbrecht
EAD 912
File

ENVIRONMENTAL COMPLIANCE AUDITING FOR CITY LIGHT

City Light facilities and practices are subject to a large number of environmental regulations and requirements. To ensure that our facilities and practices are in compliance with these regulations and requirements, we conduct environmental audits.

The Long Range Plan for Managing Hazardous Materials, adopted by the utility in 1987, states the purposes of environmental auditing:

> Auditing is the preventive maintenance for the utility's environmental machinery. It is a means for identifying needs before they become problems...for examining and improving the practices and procedures designed to effect compliance...Regular auditing provides a forum for addressing needs, sharing experiences among facilities, and documenting compliance efforts...Auditing should not dislodge cooperative efforts that now go on among concerned staff. Rather, it is...an important tool for keeping current with regulatory and policy requirements.

There are three main parts of the environmental audit:

- PRE-AUDIT - a check of files and records to identify the functions and history for the facility being audited, compile information available, and determine which requirements can be expected to apply to the site;
- SITE SURVEY - a walk-through of the facility to observe physical conditions, verify work practices, and identify possible problems or needs;
- POST-AUDIT - a report to management describing the pre-audit and site survey findings, and making recommendations to address the needs identified.

As you carry out these steps, you will look for conditions which may suggest the need for new permits, different work practices, or physical changes at a facility.

In this package you'll find a form which covers all the steps you'll follow to conduct a complete audit, with annotations and appendices to explain what is sought and why.

PRE-AUDIT: Much information can be gathered before you actually visit the site. The purposes of this step are
- to become familiar with the facility, its functions, and its management structure as they relate to environmental matters.
- to research past audits and other history of the facility so you can identify areas of concern on which you may wish to focus your audit.
- to become familair with environmental factors of special importance for the facility, if any (for example, proximity to anadramous fish-bearing rivers; vulnerability to mudslide, etc.)
- to identify and contact the individuals who will be involved in the audit, arrange schedules, and assemble materials or equipment you need (site plan, camera, etc.).

As you proceed through the rest of this form, fill in as much information as you can using sources available before you visit the site. Examine the EAD file for the facility, past audits by EAD, the Kennedy-Jenks waste stream study, oil summaries and Spill Plans, and other documents. Look for records or documents for which EAD is responsible or is a recipient; these may include permits, oil spill reports, periodic reports to other agencies. Confer with EAD staff who have been involved in projects at or affecting the facility. Generally, <u>verify</u> pre-audit information with facility personnel before or during the site survey.

X When you have gone through this process, send the form to the contact person identified for the facility with a cover memo asking them to proceed through the form in a similar manner. Ask them to note any questions they have about the information you have filled in. State when you want the form returned to you. You may propose a date and time for the site visit, or indicate when you will call to arrange the site visit. Offer a copy of the form to each person who joins the team for the site visit.

SITE VISIT: Take this form with you and use it as a guide for the site visit, filling in additional information and correcting previously filled-in information as appropriate.

POST-AUDIT: Based on the information you have, develop a report summarizing the audit, stating specific needs or problems which were identified, and making recommendations for addressing them as far as possible. The audit report should be sent to the appropriate facility lead person(s) and the division(s) director(s). It may be appropriate to send copies to other people, such as managers, project engineers, etc. For items which need a response, indicate the date you expect the response, or a follow-up meeting or other activity. The completed form and audit report should be filed in the EAD file for the facility.

I. AUDIT SITE AND PERSONNEL.

The first step is identifying the audit team and the facility to be audited. This audit is being conducted by the following staff from Environmental Affairs:

Lynn Helbrecht Curtis Durrant
Shirley Axelrod.

Identify the facility, and, if applicable, the part of the facility being audited or the functional areas of concern (for example, "waste storage area" or "drainage system").

Facility: Duwamish Substation
Location: _____

Contact the person responsible for the facility and determine the following: contact person, supervisor, staff who will assist in the pre-audit information gathering, join the audit team for the site inspection, and receive the audit report. (This may be a single person or several different people.)

Name	Phone	Org. Unit	Mail Address
Al Weiland Crew Chief	6-1719	645	

Additional people may also be involved, and should be identified below. For example, Safety & Health staff, project engineers, non-staff observers, or other staff may participate in addition to staff at the facility. List any:

Name	Phone	Org. Unit	Mail Address
None			

Record the dates for the major steps in the audit:

Notice of audit given to facility manager: 5/19
Pre-audit review completed by EAD staff: 5/18
Forms sent to facility staff: 5/20
Forms returned to EAD: 5/31
Site visit: Scheduled May 31 @ 8:30 a.m.
Post-audit report circulated by EAD: 6-8-88
Response from facility manager: _____
Other follow-up: _____

II. FACILITY HISTORY AND PLANNED CHANGES. PERMITS, AND DOCUMENTS.
List the functions or areas of the facility which the audit should address, or generally describe the activities carried out at the site. This statement is intended to help focus the audit on features or activities which raise potential or known environmental concerns. For example, discharges of water or wastes, handling of toxic substances, proximity to a river, stream, or lake. etc.:

Audit will address all functional areas of the substation. Note location adjacent to Duwamish River (oil Spill Summary report 88) - attached

If known, give the date the facility was previously audited and by whom: None known

If known, list inspections by environmental agencies, violations cited, or fines: None known

Indicate whether soil was removed, such as under PCB capacitor racks, in the past. List general locations of sampling for contaminants (PCB, PCP, pesticides, spilled oil, heavy metals):.

→ None known

Include the schedule for cleanup or compliance actions if a schedule exists or activities are in progress. List completed cleanup or compliance actions if any.

None

Major Construction or Maintenance Activities in progress or slated for the next 12 months.

Duwamish Bucket Project (in process -)

IV. PCB OR CONTAMINATED MINERAL OIL/ELECTRICAL EQUIPMENT.
Is there fluid-filled electrical equipment at the site? (Y/N) Y
(See Self-Administered Site Assessment Guide or TSCA Inspection Checklist for more information on PCB-related requirements.)

If YES, attach a list if one exists (1987 oil containment studies; SPCC Plans); otherwise, describe equipment and answer the following: Is the fluid identified? Is it labeled PCB (yellow sticker) or PCB-contaminated (white sticker)? If it contains mineral oil, has it been tested for PCB and labeled with the parts per million? — attached
(For equipment which has been tested, list in groups - e.g, "2 PCB station service transformers" "12 oil circuit breakers under 50ppm".)

Equipment(SCL #)	Fluid type/gal.	Tested for PCB (give ppm)
1 left = 26KV Bus D capacitor	- will be changed over September (Part of CIP)	>500

For each PCB TRANSFORMER (over 500ppm), has the required notification letter been sent to the Fire Dept.(by Distrib. Eng.) and nearby building owners, if any (by Customer Service)? see File 932

PCB Tfmr(SCL #)	Fire Dept letter	Building owner letter(s)
N/A		

Is there PCB waste at the site (oil cleanup materials, oil, or equipment)? (Y/N) Y If YES, desscribe, noting LABELING and HOW LONG EACH ITEM OR DRUM HAS BEEN THERE:
Yes - capacitor rack cans — Bus D
due to be replaced this year - CIP crew.

("PCB" = >500ppm; "PCB-contaminated" = 50 - 500ppm; unknown fluid = assume PCB; unknown mineral oil = assume PCB-contaminated.)
If there is PCB equipment or waste, or contaminated or unlabeled mineral oil, see the Appendix for additional information.

complete on site

(attach if available)

V. HAZARDOUS MATERIALS OR WASTES AT THE SITE.
- Describe generally - no need to reproduce the Right-to-Know inventory - and estimate quantities. Identify the source or process connected with the substances (for example, "slag from sandblasting-recycled;" "xylene from generator overhaul.") The types of substances to include here are solvents, pesticides, paints and thinners, cleaners, acids, oils (transformer oil, gasoline, diesel, lube oil), and spent products or wastes associated with these.

-Describe STORAGE location and containers (inside or out and where, in cabinet or separate room, what size drum, etc.). If kept in a tank, state whether above or underground.

-Note presence or absence of LABELS and describe.

-Indicate DISPOSAL method/destination for wastes.

-Note RECYCLING and WASTE REDUCTION activities.

Worker Right to Know Inventory - Attached
complete during walk-through

Name/Use Quantity Label? Storage/Disposal/Recycling,etc.

See Attached Sheet

For each container of hazardous material to be disposed of, state how long it has been stored.

None awaiting disposal at present

If there are underground tanks, did you attach a list with the information listed below? ___Yes ___No ___Not applicable. (See SCI Tank Inventory)
If No, fill in tank capacity, age, contents, what tank is made of, whether and when tested for leakage, whether usually empty or full, and, if out of use, last date used:

Are there storage batteries (e.g., at substations for emergency power)? Indicate how many and how much fluid in them. YES.

58 cells Exide type
6 large cells Globe

(Completed by Al Weiland)

Section V -- Hazardous Materials at the Site

1. Oils, greases, lubricants
2. Solvents
3. Paints and Thinners
4. Cleaners, degreasers
5. Spent Waste products of above
6. Compresses gases
7. Battery Acid - Control Bldg
8. Household Cleaners - Control Bldg
9. Pesticides - trucks
10. Asbestos
11. PCB

Storage Location: Butler Building -- Inside

All materials appropriately tagged.
Storage includes: 2 - 55 gallon drums.
5 gallon waste cans outside paint locker.
Smaller quantity cans inside paint locker.

Storage Location: Butler Building -- Outside

1 55 gallong drum of waste transil oil - tagged

Disposal Method

Notification to Toxics Disposal Unit
Inventory of Chemicals, etc. on Salvage Return Form
Delivered to Salvage Unit at SSC/

Recylcling and Waste Reduction Activities

Discussed waste reduction with crew as part of "Protective Measures" topic at W.I.N site specific training. For example, using smaller amounts of chemicals in smaller containers to reduce fumes; applying chemicalsto rags first; Being cautious with amounts of chemicals used.

Other toxic substances or wastes present (such as asbestos, treated wood, contaminated soil): -

asbestos is present in some old wiring insulation, some gravel stained with oil on south side of transformer banks 77-78. Diapers on leaks

Solid wastes, waste treatment, wastewater or other liquid wastes, sludge, etc. not listed above:. None

VI. SPILL PREVENTION AND EMERGENCY RESPONSE, FOR OIL AND HAZARDOUS SUBSTANCES.

Is there an Oil Spill Plan for the facility? ___Yes X No

If yes, when was it written?_____

Check whether it addresses the following items, as well as observing the facility to verify their presence.

Describe containment for large pieces of oil-filled equipment, large containers, tanks, and any spillable substance near a floor drain, yard drain, or body of water. For example, are there walls, berms, or other barriers to keep spills from spreading or entering drains or waterways; shut-off or normally-closed valves; oil-water separators, controlled sumps without automatic pumps or drains;(For oil in a substation or powerhouse, refer to 1987 spill studies in EAD; attach rather than reproduce as long as it is current.) Attach a separate page if needed.

See — Oil Spill Summary - 4/88; Attached, also
— Substation Oil Containment Study Report

Describe sensors and alarms.

Describe emergency response equipment, such as oil booms, absorbent pads, "kitty litter", sand, foam, fire extinquishers, deluge systems, personal protective gear (gloves, shoe coverings, etc. to protect the person and prevent spreading spilled material), and marked drums or bags for used or contaminated materials (include whether located near potential spill in sufficient quantity);
-for hazardous substances, there may be a decontamination zone for cleaning tools or gear or changing clothes.

Control Bldg yard — hot on site — Control Bldg, Above

on site - Are there designated people or crews for emergency response? Explain. Describe emergency response training for personnel at or on call for the site. only as stated in Emergency Operations Procedures

(not located on site)

onsite - Are there provisions for getting outside help for an emergency worse than usual? Explain.

As stated in EOP

onsite - Describe generally the notification of other divisions or parties in case of oil spills, fires, or chemical releases.

as stated in EOP

ON SITE VII. GENERAL CONDITIONS AND HOUSEKEEPING PRACTICES.

Are there any environmental permits for the facility? (See the appendix for a list and explanation of likely permits). List each permit, where it is kept, whether it is current.

None

Are there any documents or records known to be required for the facility? These may include logs or reports required by permits or other regulations. See the Appendix for a list and explanation; below, note the ones to check for during your audit:

Document	Found during audit (y/n and where)	Current(y/n)
Spill Plan (SPCC)	no	
Oil Spill Report Form		

List spills or leaks visible (from electrical equipment, drums, tanks), corroding drums, stained gravel or soil, old dump sites.

Banks 77 and 78 have leaked in past. Bank 78 leaks visible; oil being soaked up by pads. Been problem for some time - continually working on → much better now than several weeks ago.

leaking on ground & current pad for radiator Fins

Describe dump or burn sites at the facility and current use.

Are there drinking water wells at the facility?

No

~~Sandblasting...~~

Is water used in a process (such as steamcleaning, cooling, etc.) discharged directly to storm sewers or bodies of water? Explain. No

Is there a sewage treatment plant at the facility? (Y/N) N
(If yes, there should be a current NPDES permit and logs, and periodic reports to the Department of Ecology.) Describe.

Describe drains, sumps, or storage without containment which warrants attention. If, for example, a drum is near a floor drain, state whether the drum can be easily relocated.

Attached oil spill summary

Are there containers provided for ~~hazrardous wastes~~? Are they ~~labeled (e.g., chlorinated solvents, non-chlorinated solvvents, chlorinated oils, non-chlorinated oils)~~? Are there wastes stored outside the designated containers?

Addressed in Hazardous Materials Section

Are there any unidentified containers or materials which might be hazardous? If so, provide as much information about them as possible.

None apparent

How would you characterize the general condition of the facility? Is there any portion in which conditions are much worse or much better than the whole? The general condition appears in good condition and well maintained

Do you see conditions which suggest to you that other permits may be needed for this facility? Explain. None apparent

Post Audit

VIII. FINDINGS AND RECOMMENDATIONS

In terms of environmental management, how would you rate the facility on the following:

-Is responsibility clearly defined? Not determined on durin audit

-Are personnel trained and experienced? - N/A ;

-Is recordkeeping and documentation adequate? "

-Are duties divided appropriately? "

Describe how environmental responsibilities are divided or assigned: Not determined durin audit

Findings: problems or needs; good practices to maintain or expand (be precise and objective; give evidence - for example, "SPCC Plan out-of-date - last Plan dated 1976"):

* Please see cover memo (Davison to Sickler dated 6-7-88) for detailed explanation of our findings and recommendations.
  - SPPC Plan needs to be finalized for the facility.
  - Hazardous Material labeling and storage looks in good order!
  - Oil leaks @ transformer banks 77 and 78 need to be repaired

Recommendations, if any:

- Prepare updated copy of SPPC plan.
- Keep a copy of the oil spill response tab of the Emergency Operating Procedures at the substation
- Continue efforts to repair oil leaks at transformer banks 77 and 78 and continue collected oil on absorbent pods.

Personal Comments, Suggestions (include your name and phone # if you want to be involved in or informed of follow-up on these items):

Suggest setting up a meeting with responsible staff from EAD, Operations and Civil Engineering to develop details of an SPCC Plan.

Signatures, printed names, and phone ## of individuals filling in this form:

EAD staff Lynn Helbrecht Lynn Helbrecht 684-3799

Facility staff _____

Other staff _____

ENVIRONMENTAL PERMITS.
There are a few permits which may be required on an ongoing basis for the facility. There may also be permits required in connection with a construction-type project in progress or planned for the facility. Note the presence or absence of permits and conditions for which compliance will be evaluated during the site visit. Many permits carry reporting and/or notification requirements which you will want to check on as well.

1. NPDES (National Pollutant Discharge Elimination System) permit for discharges to navigable waters of pollutants including sewage, solid waste, chemical or biological materials, equipment, sand, rocks, or dirt. These require regular reporting. At present, City Light has permits for its sewage treatment plants. Potential future sources, such as wastewater from washracks or steamcleaning or vactor trucks, can be noted.

2. Air pollution sources such as dust, smoke, chemical gases. At present, City Light has no such standing permits; there may be short-term permits for asbestos removal and disposal. However, gasoline dispensing, dust-raising activities, and burniing should be noted. Asbestos removal may also be noted, although this is dealt with through Safety.

3. "Section 404" Dredge and Fill permits for discharge of dredge or fill material into waters of the United States (including wetlands), Shoreline permits for actions over or within 200 feet of water, Grading, and Drainage permits. These may apply to dam maintenance, boat docks, ditches, bridges, culverts, road-building, installation of new structures, electrical equipment, lines, or poles. These apply most likely for the term of a construction or maintenance activity in, near, or affecting a body of water or where large excavations occur. There may be conditions imposed for the life of the facility. Check in connection with CIP and maintenance work scheduled.

4. EPA/DOE Identification Number under Resource Conservation and Recovery Act (RCRA) for generators of hazardous wastes. Accumulations of under 100 kg. or 225 lbs. per batch or per month are exempt from the permit requirement (but not necessarily from recordkeeping, labeling or proper storage requirements!) At present, only the South Service Center toxics and PCB storage and disposal area has an ID number, as a small quantity generator (100 to 1000 kg. per batch or per month) and is allowed to store wastes up to 180 days.

EXAMPLES OF DOCUMENTS

1. For facilities with oil-filled equipment or tanks with petroleum products: Oil Spill Prevention, Countermeasure, and Control (SPCC) Plan - required on site and updated at least every 3 years whereever there is a single container of 660 gallons or more, or combined oil storage of 1320 gallons (above or underground, in tanks, electrical equipment, etc.) unless all the oil is underground, in which case the threshhold is 42,000 gallons. Almost every City Light facility must have an SPCC Plan.

2. Drawing(s) of the facility showing drains, sewer lines (may be included in SPCC Plan).

3. Oil Spill Report forms (309-L). (EXAMPLE ATTACHED.) Blanks and facility copies for past spills if any occurred.

4. Trouble logs/inspection records which indicate whether leaks or spills are looked for and with what frequency.

5. For facilities with underground storage tanks: Inventory records for underground storage tank contents.

6. For facilities with PCBs or untested mineral oil: PCB Manual and/or Emergency Operating Procedures. The manual is tan, prepared by EAD in 1987; the EOP is a red notebook kept updated by the Power Control Center. PCB inspection logs for facilities with PCB transformers (over 500 ppm PCB), leaking PCB equipment, or PCB storage for disposal. (EXAMPLE ATTACHED.) Note that untested equipment or mineral oil must be assumed to contaminated and handled accordingly.

7. For facilities with PCB transformers (over 500 ppm; yellow label): Labels. PCB transformer inspection log. Notification to Fire Department and to building owner if other than City Light (copies in EAD file; prepared by Distribuiton Engineering and Customer Service respectively).

8. For facilities with PCBs or PCB materials in storage for disposal (at present, only the South Service Center): Labels on equipment and drums. Weekly inspection records. Lab results for PCB samples. Disposal records/manifests, certificates of destruction. Annual report on PCBs.

9. For facilities where hazardous wastes are generated: Labels on containers. Hazardous wastes log for spent solvents, waste oils, paint wastes, pesticides, acids. (EXAMPLE ATTACHED.)

10. For facilities with hazardous wastes in storage for disposal (at present, the South Service Center): Labels on containers and vehicles. Lab results characterizing wastes. Manifests. Waste Generator's Annual Report.