

NATURAL RESOURCES AND ENVIRONMENTAL POLICY
PROJECT
INTERNATIONAL RESOURCES GROUP LTD.

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FOLLOW-UP -- ADMINISTRATION OF POLLUTION LICENSING BY
THE CENTRAL ENVIRONMENTAL AUTHORITY

Report to NAREPP/IRG

by

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BACKGROUND

On April 7, 1993, Mr. Peter Schmidt of Malcolm Pirnie, Inc. met with Ms. Ramani Ellepola (Assistant Director-Environmental Protection) and was later joined by Mr. Banderilkilka (Director - Environmental Protection) of the Central Environmental Authority to discuss recommendations made in the previous Malcolm Pirnie report for NAREPP/IRG, Administration of Pollution Licensing by the Central Environmental Authority (1992) (hereinafter Pollution Licensing.)

Conversation focused on organization staffing and deployment; organizational metrics; and use of the EPMIS database.

This report presents the current status of CEA's implementation of the recommendations made in Pollution Licensing, and it suggests some options for CEA and NAREPP/IRG followup.

STATUS OF RECOMMENDATIONS

In our initial report we made a number of recommendations, broadly grouped into three areas:

- ◆ Pollution Standards and EPL Priorities
- ◆ Organization and Management
- ◆ Information Management

These action areas include recommendations believed to be items feasible given current CEA staff and resources. Several recommendations required new legislation (discharge standards) or support of other ministries (hiring and office equipment), but for the most part could be implemented with minimal external resources. Additionally, all recommendations made were thought to be items that would directly improve the EPL department's ability to license and monitor Sri Lankan industries effectively and measurably.

While we cannot say that our recommendations have been entirely embraced and adopted by the CEA, the CEA has taken important initial steps to implement a number of our recommendations as well as other actions necessary to improve the licensing program.

Pollution Standards and EPL Priorities

Effluent Standards

Currently the CEA is reviewing legislation to establish a 5 year phase in of the current waste water effluent standards. This phase in period is expected to be in place by the end of the year. (The National Environmental Act will soon be amended to authorize licensing renewals for three, not one year.)

High Polluting Industry Focus

CEA recently requested all local authorities to provide a list of industries operating in their area. The CEA is currently reviewing this list to identify, among other things, High Polluting Industries currently operating without a license.

Procedures and Guidelines

No effort has begun in this area. This is an area of concern especially with the recent new hires. Apparent to the CEA is some inconsistency in how different environmental officers deal with similar situations.

Complaints

Substantial improvement has occurred in this area. The CEA reviewed three months of complaint activity, and the analysis showed that nearly two thirds of the complaints could be handled at the local authority level. Changes in compliant handling routines are in progress through Cabinet action to direct these complaints to the proper local authorities. Substantially fewer complaints are being submitted to CEA by M/EPA.

New Industry Licenses

To facilitate the industrialization program the BOI has been given the additional responsibility for the FIAC industries.

Organization and Management

Professional Staff

The CEA has currently filled all the open assistant and environmental officer openings. Remaining openings are for the senior and assistant director levels. The current thinking is to try to fill these positions from within and recruit new hires at the environmental and laboratory assistant level.

Support Staff (stenos and clerks)

The hiring freeze has prevented the hiring of permanent personal, but currently the needs are being met with the use of temporary help and trainees on a six month trial basis.

Information Management

No progress has been made in this area. In fact there is concern (resulting from the review of industries identified by the local authorities) that some records may have been lost. The single personal computer continues to be utilized for word processing on a priority basis.

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FOLLOW-UP RECOMMENDATIONS

While a good start has been made on the Pollution Licensing recommendations with the increase in staffing levels (both support and professional), the focus on promoting personnel from within the organization, and the increased focus on the high polluting industries, the CEA is foregoing use of two key tools that would greatly improve operations -- organizational metrics and information management. These tools can substantially improve the CEA's performance and credibility while allowing CEA to develop critical information on Sri Lankan industry and its impact on the environment, and to help guide future development of environmental regulations. CEA can, of course, always use additional resources, but it is more important first to use the resources already granted in the most efficient manner possible and then to report on accomplishments.

1. Immediate attention should be given to implementation of a set of organizational metrics. This tool will allow the agency to track its performance.
2. Additional action should focus on utilizing CEA's existing information on licensing, site visits, and complaints, and its information-gathering authority/opportunities (site visits, complaint investigations, and license applications). CEA has substantial authority and ability to collect vital environmental information that will allow it to develop new regulations, focus enforcement activities on priority polluters, as well to educate the government, NGO's and the public, and donor agencies regarding the current environmental status and priorities of Sri Lanka.

These two recommendations can be carried out within current resources limitations; they will require a small incremental effort to put in place and minimal ongoing effort to maintain.

ORGANIZATIONAL METRICS

The CEA needs to be able to monitor its resources to assure that problem areas are identified and corrective action taken. Currently there are no easy means to track organization or staff productivity, report on progress/staff accomplishments, or identify problem areas. The need for organizational metrics is greater than before because CEA's productivity should increase as the staff has been substantially increased, a major portion of the industry licensing effort is taken on by the BOI, and as the volume of complaints is reduced. With the reduction of these external demands on the EPL there should be a substantial increase in the number of licenses issued, a reduction in the number of days it takes to issue a license and the ability of the organization to resolve complaints. These changes should begin to allow the CEA to devote more time to compliance monitoring and to focus more resources on the goals of the CEA's "corporate plan."

The original recommendations in Pollution Licensing are restated below along with an example of a worksheet that could be used to collect the information manually on a daily basis. Since the EPMIS is not being currently used, and logbooks are being used effectively, we recommend that these worksheets be used either in conjunction with the current logbooks or be integrated into the logbook format. The key is tracking and developing this information on an on-going (i.e. daily) basis and providing summary charting (manually) on a weekly or monthly basis.

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EPL Issues

The number of EPLs issued or formally denied should be tracked. By tracking this information the efficiency of the organization in meeting this prime goal can be highlighted. Key questions that should be answered now are:

What is the weekly/ monthly issue rate?

What is the ratio of issues to E.O or EPL staff?

What is the status of issues by industry type? Are high polluting industries really receiving the priority?

When plotting this information, rolling averages should be used to smooth out fluctuations and present a clearer portrayal of the trends. To facilitate the tracking of the issues a work sheet similar to the one presented below should be maintained.

EPL ISSUES

	TOTAL	AVG	INDUSTRY TYPE			
			HIGH	MEDIUM	LOW	OTHER

The data recorded in this table then can be manually plotted on a weekly (monthly) basis. The worksheet should be used to capture the EPLs issued from October 1992 to the present and then maintained on a weekly (monthly) basis.

As of September 1992, EPLs were being issued at a rate of 25 permits per month. With the recent increases in staffing, and the presumed reduction in new industry licensing and complaint volume, this rate should substantially increase (by at least 100%) and continue on an upward trend as the staff becomes trained and the remaining industries become smaller.

Permit Issue Time

Permit issue time should be defined as the elapsed time between the submission of a EPL application and permit issuance or denial. Time can be measured either in working days (most accurate) or elapsed calendar days (easiest to calculate). A rolling average should be used to smooth the period to period variation. An example of a worksheet to be used for chronologically recording this data is presented below.

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EPL ISSUE TIME

EPL No.	Date of Appl.	Date of Issue	Number of Days	Avg # of Days	Industry			Resp. E.O.
					H	M	L	

Data captured in this worksheet can then portray the permit issue time graphically. Serious thought should be given to publishing this information to facilitate industries' planning when applying for permits.

Complaint Volume

One reason why complaints should be categorized and tracked is the recent request by the Environmental Steering Committee for CEA to determine how many complaints could be handled by local authorities. CEA should develop ways to track and categorize the complaints they are asked to investigate. Categories should include at least the following types, as based on the current complaint experiences:

- Solid waste
- Air emissions (e.g. particulates)
- Odor
- Effluent discharge
- Noise

Complaints should be additionally categorized, at minimum, by local authority area and industry type. An example of a worksheet is provided below:

Complaint Volume Worksheet

Date	Description	Cat.	Sector	Local Auth.	Indus Type	Date Compl	No. Days	E.O. Resp.

This worksheet can then be manually graphed by a number of different means, for example:

- Number of complaints/week (line graph)
- Type of complaints for a given period (pie chart or histogram)
- Type of a complaint/week (line graph)
- Complaints by E.O. (line graph)
- Complaints by Local Authority (line graph)
- Complaints by industry type (line graph)
- Complaint response time (histogram, or line graph)

INFORMATION MANAGEMENT

The EPL process can provide information significant to Sri Lanka's industrialization.

The CEA routinely obtains substantial data on each licensed industry. With modifications the data could be of tremendous help in identifying or supporting key environmental requirements of an industrialization policy. For example, current application and site inspection forms request data on products manufactured, raw materials used, and waste generated. Other valuable data include energy sources/amounts and numbers of employees. Guidelines and examples will help those who must complete the application and site inspection forms. Guides can be modified so each application and site inspection report displays information consistently. A formal site inspection protocol can then ensure coverage of all points and that information is compatible with EPMIS data entry requirements.

After modifying application and inspection report forms, the data collected must be maintained and easily retrievable to assure its useful application. The CEA's EPMIS system is an excellent foundation for this, but some resources must be freed up to make this system work. Resources required include:

- A dedicated data coordinator/information manager with priority access to the EPMIS computer.
- Programming training or support to maintain and enhance the EPMIS system functionality.
- Standardizing the information contained in the EPL license and site inspection.

NAREPP FOLLOW-UP RECOMMENDATIONS

NAREPP/IRG has an opportunity to provide some support to the CEA that will provide a significant return in terms of measurable results. *(Note: as NAREPP/IRG is aware because of its donor coordination program, caveats to these followup recommendations are whether, and to what extent, these items will be addressed by the MEIP's Industrial Strengthening Program, with its contractor staff in residence with CEA during much of 1992.)* By assisting the CEA with its implementation of organizational metrics, NAREPP can lay the ground work for internal and external monitoring of the CEA's effects and efficiency. A second area of support could be improving the information gathering of the CEA from its license application and site inspection process. A third area is the utilization of its EPMIS system (this may be being addressed by the MEIP). The first two opportunities, are together more fully explored below.

Establishment of the Organizational Metrics

Although there may be some inertial resistance to establishing the recommended organizational metrics at the CEA this can be overcome. While overall the tracking and summarization of these metrics work effort is low, putting the foundation in place and capturing the information from the last analysis of these metrics may be perceived as a large task. NAREPP could help CEA establish the program by providing the support to implement this program; that could "jump-start" the process. This assistance could take the form of implementing the up front work, as stated in the earlier recommendations, and turning the process over to CEA to maintain. It should also take the form of providing a monthly self report card on the CEA's activities, which could among other things include a summary of the licensing program status and productivity. We estimate that the review of the last 6 months of data and development of the worksheets and initial graphs would require 40-80 man-hours.