

出國報告（出國類別：考察）

執行中美環保合作協議第 8 號執行辦法赴美考察環評監督機制

服務機關：行政院環境保護署

姓名職稱：施勝鈞 科長

派赴國家：美國

出國期間：97 年 12 月 7 日至 12 月 15 日

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## 摘 要

本次考察主題為美國環評監督機制，考察重點主要分為四大項，包括：「環境影響評估評相關法律及制度」、「環評書件審查程序」、「通過環評後之監督及追蹤」及「環評審查過程及監督之公眾參與」。

美國中央政府環評制度之法律授權主要來自 1969 年訂定之國家環境保護法(National Environmental Protection Act, NEPA)，要求所有中央政府各機關涉及之活動，包括需中央政府各機關許可、同意、參與、財務支援等，均需依 NEPA 進行環境評估。在白宮設有 NEPA Council 委員會係最高政策執行單位，程序係由各計畫提出或目的事業主管機關擔任 Lead Agency，主辦環評審查及決定之機關（環保署擔任 NEPA 程序之諮詢單位），與該計畫相關機關可表明參與環評審查提出評論（Comment）。各州政府可自行決定是否遵循 NEPA，制定州層級之法律進行環評，以華盛頓州為例，該州訂有 SEPA 來執行，其制度基本上與中央一致。

NEPA 程序包括三個層次的分析，取決於是否會對環境產生顯著的影響。這三個層次如下：是否屬於排除的類別之判斷（美國係以排除方式，我國係依「開發行為應實施環境影響評估細目及範圍認定標準」來判斷是否應實施環評，係屬納入方式）；準備環境評估（Environmental Assessment, EA）/發現非顯著影響（Finding of No Significant impact, FONSI）；以及準備 EIS。

主導機關應就計畫對於環境是否造成顯著影響作成決定，如環境影響顯著（Significant）則簽署 DS（Determination of Significant）及範疇界定，以進行環境影響說明（Environmental Impact Statement, EIS）；如環境影響不顯著則簽署 DNS（Determination of Non-significant）無須進行 EIS 程序；各相關機關可依其職權要求開發單位執行改善環境衝擊之對策（Mitigation Measure）後同意免實施 EIS，此時所發給之 DNS 稱為 Mitigation DNS。

於中央之 NEPA 或華盛頓州之 SEPA 均未特別規定後續追蹤或監督之要求或規定，而係由該計畫環評審查過程中各相關機關依其職權進行監督執法，環保署在各案亦無特殊授權跨越部門進行監督；NEPA 或 SEPA 係環境影響綜合審查之程序，如有違反法令均係違反相關機關主管之法令，故裁罰或其他行政處分均係由各機關依其主管法令處分，並無如我國環評法載有相關處分之規定。

環評審查階段公眾參與的時機主要係於：計畫期間（公部門計

畫)、主導機關簽署 DNS (非顯著影響) 時、進入 EIS 之範疇界定期間之徵詢意見、EIS 初稿公開意見徵詢等。公眾意見係提供環評主導機關作成決定之參考，是否採納均由主導機關決定，主導機關對於公眾意見無須作成正式回應紀錄，惟應於 EIS 定稿本記載意見徵詢過程及曾表達意見之機關及個人姓名。環評監督部分並無明確之民間團體或個人參與。

本次考察心得與建議事項：

- 一、美國由計畫提出或目的事業主管機關擔任環評審查之主導機關 (Lead Agency)，結合該計畫內容及場址可能涉及同意、許可或規範之各項法令主管機關進行審查，能具更專業之能力的分別進行審查，將開發計畫可能造成之各種影響更完整的呈現，而能分析、檢討及要求改善對策，同時相關內容及承諾亦可由各主管機關有效落實監督，避免無法落實執行之情形。我國現行制度全由環保署負責全部中央層級開發案件環評審查，因係由本署環評審查委員下專案小組進行審查，雖聘請各類專家學者參與審查，惟涉及非小組專家專業領域或經常涉獵之項目，恐掛一漏萬，有所遺漏。
- 二、美國由目的事業主管機關負環評審查之責任，經 NEPA 程序後，目的事業主管機關作成評估決定，同時需負起同意計畫執行之政治或行政責任，方能切實注意環境所受的衝擊、開發計畫的必要性、公眾的意見，達到最佳的選擇。我國現行的制度，造成目的事業主管機關逃避應仔細評估開發計畫必要性之責任，一味推給環評審查，而忽略其應全面考量政策規劃之可能，不願提出對環境傷害更小更易被公眾接受的替代選擇。
- 三、環說書件係由環評審查主導機關指定顧問公司評估撰寫，由開發單位直接支付費用給顧問公司，因此能有更公正客觀之內容，避免隱蔽事實。
- 四、NEPA 或 SEPA 均未訂有專屬環評監督之條款及違反罰責，而係回歸至各相關機關與計畫相關之法令，由各機關依所管法令進行稽查及處分。因各機關均參與環評審查過程，亦提出各自對開發單位之要求及承諾事項，由各機關自行監督其後續執行情形，能更專業而有效率。至於對整體環境之影響情形，則由原環評審查之主導機關定期邀集各相關機關就各自監督情形進行討論，以了解開發案對環境的衝擊程度。
- 五、美國並非由環保署負責全部中央案件環評審查，環保署亦僅就

其主管法令部份進行稽查監督，故較無面臨監督人員超過其專業領域之情形。如由各機關本職權及所主管法令進行監督時，可能更為及時而有效。

## 目 次

|   |    |
|---|----|
| 本文  |    |
| 壹、目的  | 6  |
| 貳、過程  | 7  |
| 一、出國行程概述  |    |
| 二、主要內容概要  |    |
| (一) 舊社區更新計畫 High Point Redevelopment Project。                             |    |
| (二) NEPA (國家環境保護法) 的概述及中央層級各目的<br>事業主管機關環評審查程序。                           |    |
| (三) 華盛頓州 I90 州際公路拓寬計畫 (I90 Snoqualmie Pass<br>East Project) 之環境影響評估工作。    |    |
| (五) 華盛頓州環境保護法 (SEPA) 及程序。   |    |
| (六) Alaskan Way Viaduct & Seawall Replacement Program<br>公聽會。             |    |
| 參、心得及建議   | 22 |
| 附錄一：美國環保署選擇第三團體進行環評之法規、方式及程序。   |    |
| 附錄二：美國環保署為 Lead Agency 進行環評審查之 Pogo Mine<br>Project 環說書定稿本中有關環評書件發展程序之摘錄。 |    |
| 附錄三：「Citizen's Guide to SEPA Review and Commenting」                       |    |
| 附錄四：「SEPA Handbook」。  |    |

## 壹、目的

本項考察係行政院環境保護署（下稱本署）與美國環境保護署（下稱 USEPA）合作協議第 8 號執行辦法下之合作項目，計畫目的係透過本署派員赴美考察下述議題，以吸取美國在環境影響評估工作之方式及經驗：

- 一、美國環境影響評估法令及規定。
- 二、美國中央政府如何執行環境影響評估工作。
- 三、美國中央政府及地方政府如何劃分環評監督工作。
- 四、台灣和美國環評監督法規的比較和如何執行。
- 五、非政府組織及其他相關單位或人士的夥伴關係。
- 六、環境影響評估案件之最佳的管理和技術。

## 貳、過程

### 一、出國行程概述：

- 97.12.07 啓程，出發至美國西雅圖
- 97.12.08 晚間抵達西雅圖
- 97.12.09 上午 準備次日議程及簡報資料
- 97.12.09 下午 了解舊西雅圖城市發展歷史及新都市規劃－有關都市暴雨逕流及都市污水處理問題【與水保處集水區優氧化參訪計畫共同進行】
- 97.12.10 上午 赴美國 EPA Regional 10 拜訪，由 EPA 台灣計畫經理 Ms. Kathy Veit；環境、原住民及公眾事務辦公室主管 Mr. Rick Parkin；水與集水區辦公室主管 Mr. Michael Gearheard 接待及歡迎。進行簡報「台灣環評監督及追蹤現況、困難及挑戰」(TWEPA, 施勝鈞)；「台灣優氧化議題概述」(TWEPA, 汪士鈞)；「EPA 在優氧化議題的歷史和各種挑戰」(EPA, Ms. Holly Arrigoni)。【與水保處集水區優氧化參訪計畫共同進行】
- 97.12.10 下午 參觀西雅圖結合環保概念(減少暴雨淨流)之舊社區更新計畫 High Point Redevelopment Project【與水保處集水區優氧化參訪計畫共同進行】
- 97.12.11 由 EPA 環評審查單位 Ms. Lynne McWhoter 說明中央的及 EPA 的環評程序，包括 NEPA (國家環境保護法) 的概述及中央層級各目的事業主管機關環評審查程序。隨後參訪由華盛頓州運輸部 (Washington State Department of Transport, WSDOT) 主導環評審查之 I90 州際公路拓寬計畫，並由該計畫主管 Mr. Brian White 及環境經理 Mr. Jason Smith 負責接待及現場解說。
- 97.12.12 上午 訪問公民團體『Duwamish 河清潔聯盟 DRCC』及西雅圖港務局共同執行之 Duwamish 河復育計畫，由 DRCC 主席 Ms. BJ Cummings 及西雅圖港務局 Mr. Joseph Gellings 負責接待

及現場解說。

- 97.12.12 下午 由華盛頓州生態部 (Washington State Department of Ecology, WSDOE)，華盛頓州環境保護法 (SEPA) 政策主管 Ms. Annie Szvetecz 說明 SEPA 程序。
- 97.12.12 晚間 赴西雅圖市政府參觀 Alaskan Way Viaduct & Seawall Replacement Program 公聽會。
- 97.12.13 上午 赴 EPA 第十分署辦公室討論 EPA 為 Lead Agency 進行環評審查之阿拉斯加採礦計畫環評審查及後續監督，台灣監督實例分享及討論，EPA 研究發展中之環評監督 GIS 資訊系統。
- 97.12.13 下午 與 EPA 台灣計畫經理 Ms. Kathy Viet 討論後續合作之可能性計畫。
- 97.12.14 整理相關資料，搭機離美。
- 97.12.15 抵達台灣。



(12月10日舉行歡迎會及雙方業務簡報情形)

## 二、主要內容概要：

### (一) 舊社區更新計畫 High Point Redevelopment Project

西雅圖市為朝向永續發展，執行策略其中之一即”暴雨低衝擊發展”(Stormwater Low Impact Development, LID)，目的在透過雨水蓄留及入滲，以減少暴雨逕流量，避免地表沖刷破壞，並經由土壤滲透作用以減少污染。而具體執行方式除了 LID 法規的修訂外，129 英畝舊社區更新計畫 High Point Redevelopment Project 係屬於示範性計畫，由西雅圖市政府房屋部門執行，計畫成果將推廣至華盛頓州其他地區。該計畫分為二個階段，第一階段二個區塊的計畫在

2003 年 6 月開始建設，第二階段將在 2009 年完成，計畫包括 1600 個混合不同收入階層的住宅單元。



這個計畫係整合既有的大型和高密度住宅區都市自然排水系統（Natural Drainage System, NDS）觀念，結合新的社區成為街網時也創造一個網絡連接植栽和綠地的線狀沼澤帶。這樣的方式可以達到社區綠地空間、行人安全和水質改善需要的平衡。



工程設計主要理念在增加雨水蓄留及入滲，方式包括減少不透水鋪面、增加表面孔隙率（如道路材質更改）及設計適當植栽土壤以維持適當入滲速率達到過濾去除污染物質的效果。



（住家雨水蓄留設施及路面雨水逕流導引至綠帶土壤入滲）



(特殊路面鋪面材質及社區蓄洪池)

(二) NEPA (國家環境保護法) 的概述及中央層級各目的事業主管機關環評審查程序。

美國中央政府環評制度之法律授權主要來自 1969 年訂定之國家環境保護法 National Environmental Protection Act, NEPA，要求所有中央政府各機關涉及之行動 (Action)，包括需中央政府各機關許可、同意、參與、財務支援等，均需依 NEPA 進行環境評估，在白宮設有 NEPA Council 委員會係最高政策執行單位。

NEPA 要求中央機關在他們計畫和決策的過程必須利用一個系統的跨學們方法將環境考量整合進去整個過程。特別是，所有中央機關必須準備詳盡的說明分析環境的衝擊和替代方案，當主要的中央行動會對環境造成顯著的影響。這些說明通常就是所謂的環境影響說明書件 (EISs)。

NEPA 確保中央機關會把環境影響考慮到中央的計畫和決策過程中，而且包含施工和營運行為。NEPA 涵括全面性的潛在影響，包括而不僅限於水質、溼地、空氣品質、瀕臨絕種物種和文化資產的衝擊。

採取行動的中央機關負責執行 NEPA 的要求，部分的州如北卡、麻州及華盛頓州也有同樣的要求，NEPA 適用的計畫必須在開發前和執行中符合這些要求，NEPA 為中央機關建立很好的程序和計畫實施步驟，而不會對於獨立的環境法律 (如清淨空氣法、清淨水法及瀕臨絕種物種法) 取代和產生競合的情形。

NEPA 程序包括三個層次的分析，取決於是否會對環境產生顯著的影響。這三個層次如下：是否屬於排除的類

別之判斷（美國係以排除方式，我國係依「開發行為應實施環境影響評估細目及範圍認定標準」來判斷是否應實施環評，係屬納入方式）；準備環境評估（**Environmental Assessment, EA**）/發現非顯著影響（**Finding of No Significant impact, FONSI**）；以及準備 **EIS**。

在第一個層級，一個計畫可被以類別排除不用實施詳細的環境分析，如果它符合中央機關先前已經決定沒有顯著影響的特定要項，許多機關已經訂出一些開發行為，在 NEPA 的規範下通常不需要進行環境評估的排除類別。

在第二個層級分析，中央機關準備一個完成的環境評估 EA 去決定是否這個中央層級的行動將顯著的影響到環境。如果這個答案是不會，則這機關簽署「發現非顯著影響，FONSI」。FONSI 可以闡述主管機關將採取之降低（減輕）潛在顯著環境影響的方法或措施。

如果 EA 決定所提出之中央行動可能會導致之環境傷害是顯著的，則中央機關應準備一份 EIS，這份 EIS 是對於所提出的開發計畫及各種替代方案更詳細的評估。公眾、其他中央機關、及外部團體可以提供意見到 EIS 的準備過程，以及對 EIS 初稿完成時提出評論。如果中央機關認為這個開發行為可能顯著衝擊到環境，或如果這個計畫具有環境爭議性，這個機關可以選擇直接準備 EIS 而無需經過第二層次 EA 程序。

在 EIS 定稿（**Final EIS**）準備好後，該中央機關需準備一個有關它作出決定的公開紀錄來闡述 EIS 中的發現，包括替代方案的考慮，都已經在決策過程中考慮進去。

EA 內容包括：1.計畫需要性 2.無法避免需使用的資源的替代方案 3.對於所提出之計畫及替代方案的環境影響 4.資詢的機關和個人

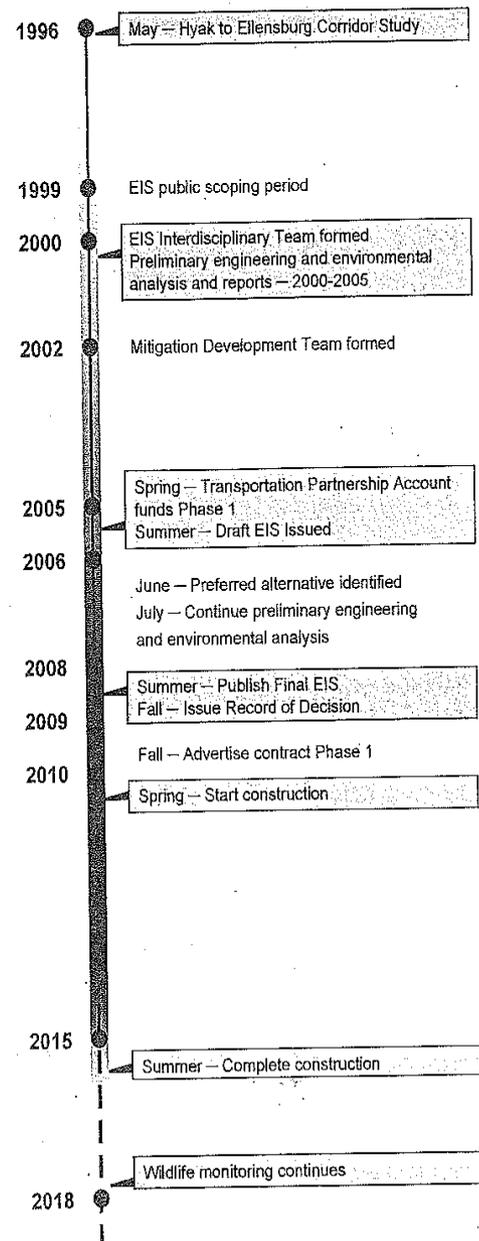
EIS 內容包括：1.目的和需要 2.各種替代方案 3.被影響的環境 4.開發所造成的環境後果 5.撰寫人、代理人、組織、提出聲明的人士 6.目錄 7.附錄

(三) 華盛頓州 I90 州際公路拓寬計畫(I90 Snoqualmie Pass East Project)之環境影響評估工作。

州際 90 號公路是 Puget Sound 地區眾多人口及商業中心與農地、各種工業和東華盛頓州密集的遊憩區主要的聯絡道路。計畫目的是將目前因 6 線道縮減 4 線道所導致之交通瓶頸予以拓寬打通並改善路況。

這項計畫因為它的位置沿著一條高山陡峭通道而有許多獨特的環境的和設計的挑戰，計畫區域有大的雨量和降雪，部分區域會經過介於湖岸和斷崖間的狹窄通道，因此使道路很容易落石和坍方，同時路線穿越保護區和保留區影響各種動植物棲地，並阻斷野生動物遷移路線。

此項計畫因對於自然環境和生態保育衝擊甚大，因此主導計畫的華盛頓州運輸部 (WSDOT)和聯邦高速公路局(FHWA)於計畫提出初期就考量公眾意見參與及跨部門合作的重要，自 1996 年開始研議直到 2008 年中方完成環評定稿，對於各項公眾意見及可能環境影響均妥善加以處理，左表為計畫歷程。



對於環評過程的重視及努力可由下列各點看出：

1. FHWA 和 WSDOT 根據 NEPA 和 SEPA 法律規定，在範疇界定期間，邀請公眾參與，以公聽會、公眾會議及網站

方式來蒐集各界意見。

2. 建立各機關跨學門的團隊(*Interdisciplinary Team, IDT*)擔任主要的諮詢主體來整合相關的科學以及各機關關切的議題，同時推薦最佳方案(*Preferred Alternative*)。
3. 建立補救對策發展團隊(*Mitigation Development Team, MDT*)作為在生態關聯問題各機關諮詢團體。MDT 發展出一份綜合性的表，有關：相關議題、評估設計的觀點和發展一系列的標準。
4. WSDOT 組成 3 個其他的顧問委員會來提供在溼地、暴雨管理及野生動物監測等領域的專業技術。
5. WSDOT 創立了一個革命性的夥伴關係，與大學的研究學者及保育團體，去設計和執行本計畫的野生動物監測計畫。
6. FHWA 和 WSDOT 參與簽署協議來建立跨機關的程序來考量對水生物潛在的衝擊。
7. WSDOT 形成和交通組織、協會和商業的關係來深入了解高速公路使用者的需求。
8. FHWA 和 WSDOT 發展各種關係和不同的機構、土地所有人、和公民團體來減少可能影響計畫的衝突，特別是土地使用和休閒目的使用可能影響野生動物保育相關規劃的衝突。

本項計畫成功的整合交通、生態、環境、土地使用各機關及環保團體、計畫受益者就其所關心的事項在計畫期間就加以回應及考慮，所採行的對策也因此可以納入計畫中，甚至納入工程設計，而更符合各界的需求同時建立互信，下表顯示在該計畫各主要階段所執行內容(設計係結合各項考量)。然而，我們必須了解 FHWA 和 WSDOT 在 NEPA 和 SEPA 的規定下需為環評審查的主導機關，同時他們亦為該計畫之主管機關及執行機關，評估、規劃、設計、擬定及執行均係他們的責任，所以在計畫形成過程中結合各機關、公眾(包括環保團體和受益者)的意見，形成共識將有利於計畫執行並減少反對意見，此種制度和所產生的效果與我國是有很大的不同。

**Exhibit ES-1  
Process of Development**

| Design %         | 0%   | 10%   | 30%  |
|------------------|--|---|--|
| <b>Steps</b>     | <b>Scoping</b>   | <b>Preliminary Design and Environmental Documentation</b>   | <b>Design and Environmental Permitting</b>   |
| <b>Processes</b> | <ul style="list-style-type: none"> <li>Public Hearings</li> <li>Form IDT</li> <li>Develop Study Plan</li> <li>Develop Communications Plan</li> <li>Begin Engineering Investigations</li> <li>Begin Environmental Investigations</li> <li>Identify Alternatives</li> <li>Begin Cost Estimation</li> </ul> | <ul style="list-style-type: none"> <li>Begin Right-of-Way Investigations</li> <li>Preliminary Impact Analysis</li> <li>Publish Draft EIS</li> <li>Identify Mitigation Needs and Opportunities</li> <li>Begin Contract Plans, Specifications and Estimates</li> <li>Refine Cost Estimates</li> </ul>                   | <ul style="list-style-type: none"> <li>Identify Preferred Alternative</li> <li>Refine Cost Estimates</li> <li>Publish Final EIS</li> <li>Publish Record of Decision</li> <li>Begin Right-of-Way Acquisition</li> <li>Submit Permit Applications &amp; Mitigation Plans</li> <li>Document Commitments</li> <li>Begin Federal Land Transfer(s)</li> <li>Contract Plans, Specifications and Estimates 30% Complete</li> </ul> |
|                  | 60 %   | 90%   | 100% M/O   |
|                  | <b>Contract Development and Mitigation Plans</b>   | <b>Final Contract</b>   | <b>Construction</b>  |
|                  | <ul style="list-style-type: none"> <li>Develop Final Mitigation Plan(s)</li> <li>Negotiate Permit Conditions and Stipulations</li> <li>Begin Tracking Project Commitments</li> <li>Begin Pre-Construction Monitoring</li> <li>Contract Plans, Specifications and Estimates 60% Complete</li> </ul>       | <ul style="list-style-type: none"> <li>Finalize Right-of-Way Acquisition</li> <li>Receive Permits</li> <li>Advertise Contract</li> <li>Award Contract</li> <li>Continue Tracking Project Commitments</li> <li>Finalize Mitigation Plans</li> <li>Contract Plans, Specifications and Estimates 90% Complete</li> </ul> | <ul style="list-style-type: none"> <li>Begin Construction</li> <li>Monitor Construction</li> <li>Monitor Mitigation &amp; Permit</li> <li>Compliance</li> <li>Finish Construction</li> <li>Continue Tracking Project Commitments</li> </ul>  |
|                  |  |   | <b>Maintenance &amp; Operations</b>  |
|                  |  |   | <ul style="list-style-type: none"> <li>Begin Maintenance &amp; Operations</li> <li>Monitor Mitigation Sites</li> <li>Maintain Highway</li> <li>Adaptive Management and Wildlife Monitoring</li> </ul>  |



(計畫場址簡報及現勘情形)

(四) Duwamish 河復育計畫之公眾參與。

Duwamish 河下游在經過南西雅圖地區，長度 5 英里的河床經美國環保署列為中央超級基金場址(Super found site)，列入國家最受毒性物質污染的場址。1998 年該河所在之國王縣(King County)政府發現在 Duwamish 河抓到的

魚及螃蟹含有超過在乾淨水域捉到魚及螃蟹高達 7 倍的致癌化學物質。在所有河中的鮭魚幾乎均含有多氯聯苯 PCBs。而河底部有超過安全標準的重金屬，例如水銀達標準的 4 倍。因為對於健康影響的嚴重關切，美國環保署正要求廣泛研究存在的風險，對於人類健康、魚類和野生動物，也將要求主要的污染者負擔清理費用。

Duwamish 河清潔聯盟(The Duwamish River Cleanup Coalition, DRCC)係結合受持續污染影響的各社區、環境的和小型企業組織所進行的各種清理計畫，任務是在確保 Duwamish 河的清理工作是可接受的，而且對於社區及保護的魚類、野生動物及人類健康是有利的。

在華盛頓州 Duwamish 河是最工業化的水路之一，經過南西雅圖地區的 5 英哩河道二旁都是各種工業。許多年來，經由管線或溢流的廢棄物已經嚴重威脅到此河川的健康。污染物包括 PCBs、油和其他碳氫化合物；水銀、鉛和其他重金屬；殺蟲劑；砷；甚至是水肥。

波音公司、西雅圖港、國王縣和西雅圖市都被認為是主要的污染者或潛在需負責的團體 (Potentially Responsible Parties, PRPs)。波音機場溢流的化學物質和從第二次世界大戰以來炸彈的製造、船隻油漆的重金屬、水泥材料中的砷、城市街道暴雨時沖刷的油、和水肥管線都在此河長期毒害中扮演一定的角色。

所有的污染者均需支付清理的費用，但問題是：需要進行那些研究？我們要採取那種清理方法？以及到那種乾淨的程度才是”乾淨”？這就是Duwamish河清潔聯盟DRCC存在目的。

DRCC是美國環保署承認的正式的社區顧問團體 (community advisory group)，代表社區的利益。他們接受包括環保署及其他單位補助去聘請技術顧問來檢視相關研究和計畫。同時DRCC也參與所有清理計畫的觀點，也從事確保清理工作符合社區的標準。



(DRCC 主席 Ms. BJ Cummings 說明該組織運作情形及岸邊廢棄車輛拆解工廠)

### (五) 華盛頓州環境保護法 (SEPA) 及程序

華盛頓州決定遵循 NEPA，制定州層級之法律 The State Environmental Policy Act, SEPA 來進行環評，其制度基本上與中央一致，該州係由生態部門(Department of Ecology, DOE)來負責 SEPA 制度的運作。

其主要運作內容及程序如下：

#### 1. 實質計畫 (Project) 或非實質計畫

(Non-project，如新市鎮都市計畫) 於計畫提送核定、許可或同意機關時，該機關應判斷是否符合 SEPA 且不屬於排除類別 (Except Category) 則需進行評估。



#### 2. 該機關原則上即為評估程序之主導機關 (Lead Agency)，與該計畫相關之其他機關參與審查程序及評論 (Comment)。主導機關亦可透過協商由其他機關擔任。主導機關會與開發單位簽署備忘錄聲明其為 SEPA 主導機關，並賦予開發單位提供相關環境衝擊影響資訊之義務。

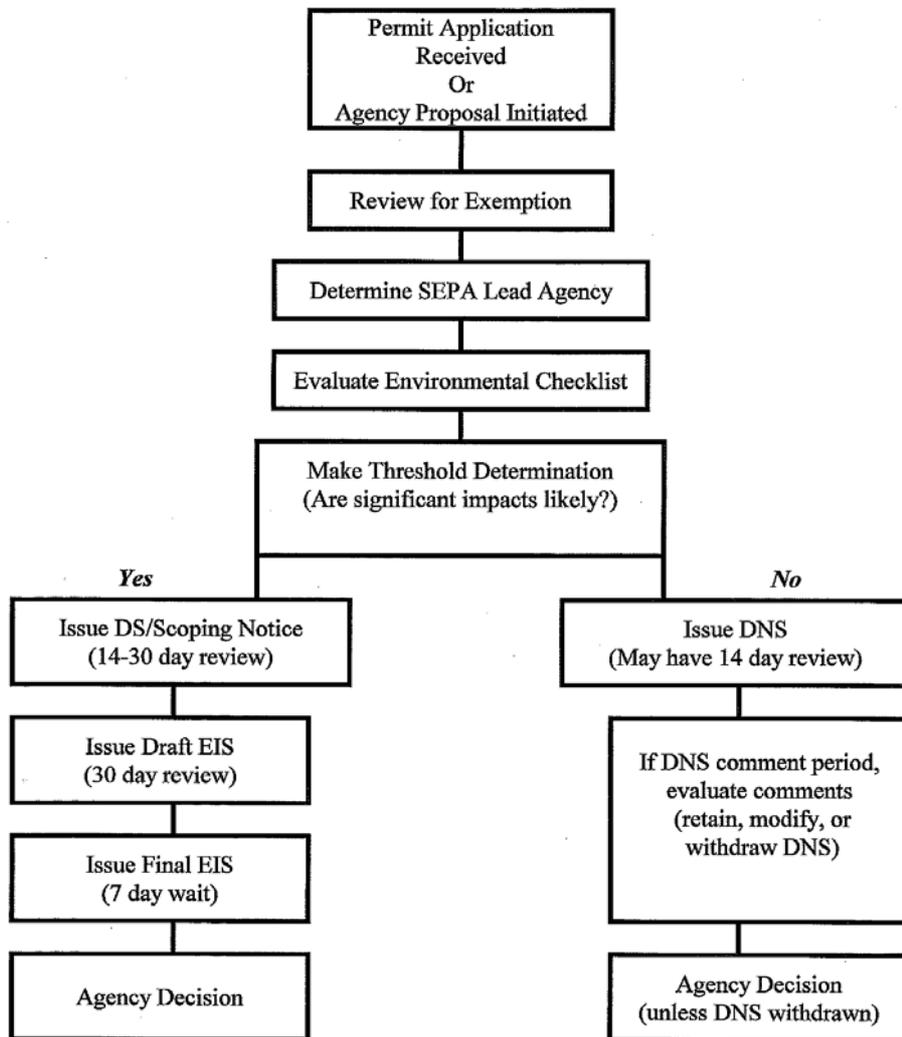
#### 3. 主導機關應就計畫對於環境是否造成顯著影響作成決定，如環境影響顯著 (Significant) 則簽署 DS (Determination of Significant) 及範疇界定，以進行環境影響說明 (Environmental Impact Statement, EIS)；如環境影響不顯著則簽署 DNS (Determination of Non-significant) 無須進行 EIS 程序；各相關機關可依其

職權要求開發單位執行改善環境衝擊之對策 (Mitigation Measure) 後同意免實施 EIS，此時所發給之 DOS 稱為 Mitigation DOS.

4. 簽署 DS 後應進行範疇界定，徵求各機關及公眾意見，而後製作 EIS，EIS 可由主導機關製作，惟通常係由主導機關指定顧問公司，由開發單位與該顧問公司簽約並支付費用，主導機關簽署 EIS 初稿送各相關機關就其職權部分審閱及評論 (SEPA 評論期限為 30 天，必要時得延長)，完成後主導機關簽署 EIS 定稿並進行公開等待期 (公眾評論及意見處理，SEPA 期限為 7 天)，最後由主導機關作成決定，會同相關機關簽署，文件中載明各相關機關於該計畫許可或同意的範圍或法律，及相關的承諾及對策以利各機關依職權進行後續監督。
5. DNS 可以提供各機關及公眾評論 (SEPA 可以有 14 天)，是否進行公開評論係由主導機關決定，如進行評論可以保留、修改或撤銷 DNS。

SEPA 程序如下圖：

## SEPA REVIEW PROCESS



(六) Alaskan Way Viaduct & Seawall Replacement Program 公聽會。

華盛頓州、國王縣和西雅圖市企圖共同尋求一有關西雅圖中央水岸區(Central Waterfront section)SR99 道路高架段的更新改善方案，其目的是來有助於貨物及人們快速的穿越整個區域的運輸網絡。

這三個政府經常性的在全西雅圖舉行公開說明會，讓公眾能了解和評論該項計畫。2007 年 12 月由各政府首長指定地區社區和商業代表組成顧問委員會(advisory committee)，30 位委員代表各社區、各種經濟利益和主要運輸組織，顧問委員會目的在檢視、辯論和提供評論在更

新計畫的技術性工作上。

在政府執行環境影響評估時，已經完成其中的「計畫目的和必要性說明」草稿、方案選擇的「評估方法」和描述改進運輸系統的 8 個可能包裹性方案。而根據中央 NEPA 和州 SEPA 的環境的程序，政府進行公眾範疇界定(Public Scoping)來聽取公眾對於那些議題應該納入環境文件中考慮。

本此參觀之公聽會係刊載於華盛頓州運輸部門網頁有關係列公眾參與訊息的項目中(如下表)，該計畫 2008 年 12 月 11 日舉行之顧問委員會公開會議(民眾可參與旁聽)，對於政府部門所提出之方案進行討論及辯論。而表列 12 月 15 日進行公眾論壇及範疇界定會議，惜因已結束考察未能參加。

### Upcoming Events

For bus route information, visit Metro's Trip Planner or call 206-553-3000.

| Date/Time                    | Name   | Location   |
|------------------------------|--|--|
| Dec. 8, 2008<br>5:30 - 8 pm  | Briefing to answer questions from Stakeholder Advisory Committee (SAC) members about <u>central waterfront evaluation results</u> presented at the Dec. 4 SAC meeting.   | Seattle City Hall<br>Bertha Landes Room<br>600 Fourth Avenue |
| Dec. 11, 2008<br>4:30 - 8 pm | Stakeholder Advisory Committee meeting (for the <u>Central Waterfront</u> )  | Seattle City Hall<br>Bertha Landes Room<br>600 Fourth Avenue |
| Dec. 15, 2008<br>5 - 7:30 pm | <u>Central waterfront</u> public forum and scoping meeting<br>There will be a presentation, question and answer session, and opportunity for public comment. View the <u>invitation</u> (pdf 266 kb) for more information. | Town Hall<br>1119 Eighth Avenue,<br>Seattle                  |
| Dec. 18, 2008<br>4 - 7:30 pm | Stakeholder Advisory Committee meeting (for the <u>Central Waterfront</u> )  | Seattle City Hall<br>Bertha Landes Room<br>600 Fourth Avenue |



(左圖為公開會議計畫簡報情形，右圖為委員評論)

(七) 美國環保署為 Lead Agency 進行環評審查之 Pogo Mine Project 阿拉斯加地下採礦計畫環評審查程序及後續監督。

Pogo Mine Project 阿拉斯加地下採礦計畫是由 Teck-Pogo Inc.提出，目的是要在阿拉斯加州的 Goodpaster River 河谷採取金礦，預計每天約採取 2,500 噸礦石，初期每年約生產 375,000 盎司的黃金，然後逐步提高到每天採取 3,500 噸礦石，及每年生產 500,000 盎司的黃金。開發單位預計於 2003 年進行開發計畫。開發單位向美國環保署申請「國家污染物排放消除系統 National Pollutant Elimination System, NPED」之許可來排放廢水，依據美國水清潔法案(Clean Water Act, CWA)被視為是新排放源，適用於 NEPA。因為所提出之計畫對人類環境品質有潛在的顯著影響，而簽署 NPED 許可是一個『主要的中央行動 Major federal action.』，NEPA 要求需準備環境影響說明書 EIS。

1997 年秋天，開發單位開始與各個州和中央的機關討論地下層的開發許可；2000 年 6 月開發單位和美國環保署簽署瞭解備忘錄(Memorandum of Understanding, MOU)，來建立接下來準備 EIS 文件的程序和條件。2000 年 8 月，開發單位成立 NPED 申請案申請排放廢水到一個土壤吸收系統和地下補注井中。這個申請正式開始 EIS 程序。2003 年 1 月開發單位修正 NPED 許可申請，計畫從離河的廢水處理工作站排放廢水到 Goodpaster River 河谷平原的一條渠道，直接排入 Goodpaster River。

美國環保署依據 NEPA 承擔負責準備 EIS 文件責任的主導中央機關，並決定它將請第三團體的合約商(a

**third-party contractor**)來準備 EIS，根據美國環保署和開發單位的瞭解備忘錄(MOU)合約商必須在美國環保署指導下準備 EIS 文件，而合約商直接向中央機關提供專業技術和其他協助。合約商是直接在官員的監督下工作而非開發單位。根據備忘錄所需的費用由開發單位支付，本案係由 Michael Baker, Jr., Inc.擔任第三團體合約商。該公司必須沒有財務利益在這項計畫而且必須提出正式的財務利益聲明(Statement of Financial Interest, SOFI)。(相關資料請參閱附錄一：美國環保署選擇第三團體進行環評之法規、方式及程序)

在 EIS 準備過程中，除了美國環保署擔任主導機關(Lead Agency)外，協同機關包括美國陸軍工兵團(the U.S. Army Corps of Engineer, COE)，和阿拉斯加州自然資源部門(State of Alaska Department of Nature Resources, ADNR)。這個 EIS 可以被各機關當作在他們各項許可申請決定的依據和他們自己的決定文件(Record Of Decision, ROD)或其他適當的程序，相關許可的管轄權表列於本報告附錄二：美國環保署為 Lead Agency 進行環評審查之 Pogo Mine Project 環說書定稿本中有關環評書件發展程序之摘錄，Section 1.7 Agency Roles and Responsibility。

因此，在通過EIS程序後有利於開發單位申請其他參與機關之各項許可，同時未來也由各機關據以執行該開發計畫之後續監督追蹤。以本案例，目前進入實質開發階段，美國環保署主辦人員表示，每年定期由相關機關人員開會研討及檢討，開發現況、對策執行情形及環境監測資料所呈現之環境衝擊影響，但對於開發單位不遵從對策或承諾情形並無環評單獨處罰規定，而係由各項許可機關依其法令處理。

## 參、心得及建議

一、本次考察主題為美國環評監督機制，考察重點主要分為四大項，包括：「環境影響評估評相關法律及制度」、「環評書件審查程序」、「通過環評後之監督及追蹤」及「環評審查過程及監督之公眾參與」。茲分別說明如下：

### (一) 環境影響評估評相關法律及制度：

美國中央政府環評制度之法律授權主要來自 1969 年訂定之國家環境保護法 National Environmental Protection Act, NEPA，要求所有中央政府各機關涉及之活動，包括需中央政府各機關許可、同意、參與、財務支援等，均需依 NEPA 進行環境評估。在白宮設有 NEPA Council 委員會係最高政策執行單位，程序係由各計畫提出或目的事業主管機關擔任 Lead Agency 主辦環評審查及決定之機關（環保署擔任 NEPA 程序之諮詢單位），與該計畫相關機關可表明參與環評審查提出評論（Comment）。各州政府可自行決定是否遵循 NEPA，制定州層級之法律進行環評，以華盛頓州為例，該州訂有 SEPA 來執行，其制度基本上與中央一致。

### (二) 環評書件審查程序(以華盛頓 SEPA 說明)：

1. 實質計畫（Project）或非實質計畫（Non-project，如新市鎮都市計畫）於計畫提送核定、許可或同意機關時，該機關應判斷是否符合 NEPA 或州法令(如 SEPA)且不屬於排除類別（Except Category）則需進行評估。
2. 該機關原則上即為評估程序之主導機關（Lead Agency），與該計畫相關之其他機關參與審查程序及評論（Comment）。主導機關亦可透過協商由其他機關擔任。主導機關會與開發單位簽署備忘錄聲明其為 NEPA 主導機關，並賦予開發單位提供相關環境衝擊影響資訊之義務。
3. 主導機關應就計畫對於環境是否造成顯著影響作成決定，如環境影響顯著（Significant）則簽署 DS（Determination of Significant）及範疇界定，以進行環境影響說明（Environmental Impact Statement, EIS）；如環境影響不顯著則簽署 DNS（Determination of No Significant）無須進行 EIS 程序；各相關機關可依其職權要求開發單位執行改善環境衝擊之對策

(Mitigation Measure) 後同意免實施 EIS，此時所發給之 DOS 稱為 Mitigation DOS.

4. 簽署 DS 後應進行範疇界定，徵求各機關及公眾意見，而後製作 EIS，EIS 可由主導機關製作，惟通常係由主導機關指定顧問公司，由開發單位與該顧問公司簽約並支付費用，主導機關簽署 EIS 初稿送各相關機關就其職權部分審閱及評論 (SEPA 評論期限為 30 天，必要時得延長)，完成後主導機關簽署 EIS 定稿並進行公開等待期 (公眾評論及意見處理，SEPA 期限為 7 天)，最後由主導機關作成決定，會同相關機關簽署，文件中載明各相關機關於該計畫許可或同意的範圍或法律，及相關的承諾及對策以利各機關依職權進行後續監督。
5. DNS 可以提供各機關及公眾評論 (SEPA 可以有 14 天)，是否進行公開評論係由主導機關決定，如進行評論可以保留、修改或撤銷 DNS。

(三) 通過環評後之監督及追蹤：

1. 於中央之 NEPA 或華盛頓州之 SEPA 均未特別規定後續追蹤或監督之要求或規定，而係由該計畫環評審查過程中各相關機關依其職權進行監督執法，EPA 在各案亦無特殊授權跨越部門進行監督 (因各項承諾及內容均係由各機關於審查過程中要求，故由各機關自行進行監督)。依 EPA 擔任主導機關之阿拉斯加採礦計畫環評案為例，通過後，由各相關機關各自監督其權責部份，僅由主導機關 EPA 每年定期召開跨相關機關會議，檢討各機關監督開發單位執行該案內容及承諾之情形。
2. NEPA 或 SEPA 係環境影響綜合審查之程序，如有違反法令均係違反相關機關主管之法令，故裁罰或其他行政處分均係由各機關依其主管法令處分，並無如我國環評法載有相關處分之規定。

(四) 環評審查過程及監督之公眾參與：

1. 環評審查階段公眾參與的時機主要係於：計畫期間 (公部門計畫)、主導機關簽署 DNS (非顯著影響) 時 (法律並未強制要求)、進入 EIS 之範疇界定期間之徵詢意見、EIS 初稿公開意見徵詢等。
2. 公眾意見係提供環評主導機關作成決定之參考，是否採

納均由主導機關決定，主導機關對於公眾意見無須作成正式回應紀錄，惟應於 EIS 定稿本記載意見徵詢過程及曾表達意見之機關及個人姓名。

3. 環評監督部分並無明確之民間團體或個人參與，但參訪之 Duwamish 河復育計畫，EPA 及西雅圖港均提供部分經費給民間團體以聘請專家進行他們自己的監測。

## 二、心得及建議事項

### (一) 環評審查制度：

1. 美國由計畫提出或目的事業主管機關擔任環評審查之主導機關 (Lead Agency)，結合該計畫內容及場址可能涉及同意、許可或規範之各項法令主管機關進行審查，能具更專業之能力的分別進行審查，將開發計畫可能造成之各種影響更完整的呈現，而能分析、檢討及要求改善對策，同時相關內容及承諾亦可由各主管機關有效落實監督，避免無法落實執行之情形。我國現行制度全由環保署負責全部中央層級開發案件環評審查，因係由本署環評審查委員下專案小組進行審查，雖聘請各類專家學者參與審查，惟涉及非小組專家專業領域或經常涉獵之項目，恐掛一漏萬，有所遺漏。例如某天然氣海底管線工程桃園大潭上岸段工程經過藻礁案件，於審查過程未能發現該項特有景觀，致施工後特有生物保育中心發現時已造成傷害，開發單位亦害怕施工受阻反加速施工，造成破壞擴大，如地景及生態保育主管機關於該案審查期間及負有生態保育部分審查之義務，並須共同簽署 EIS，也許將能有更週延審查而避免遺憾。
2. 美國由目的事業主管機關負環評審查之責任，經 NEPA 程序後，目的事業主管機關作成評估決定，同時需負起同意計畫執行之政治或行政責任，方能切實注意環境所受的衝擊、開發計畫的必要性、公眾的意見，達到最佳的選擇。我國現行的制度，造成目的事業主管機關逃避應仔細評估開發計畫必要性之責任，一味推給環評審查，而忽略其應全面考量政策規劃之可能，不願提出對環境傷害更小更易被公眾接受的替代選擇。以此次參訪 I90 州際公路拓寬計畫，華盛頓州交通部負環評審查之責任，所以自計畫選線、計畫之必要性、環境之衝擊等

等均仔細評估，並利用各種可能機會向公眾說明，待進入 EIS 審查程序時，更不斷增加各相關機關及組織組成 5 大部門合作關係，共同來考量環境衝擊及研擬可採取的對策，因此能更有效說服環保團體及公眾，十分值得參考。

3. 以美國環保署為 Lead Agency 進行環評審查之阿拉斯加採礦計畫為例，環評書件係由美國環保署指定顧問公司評估撰寫，由開發單位直接支付費用給顧問公司，因此能有更公正客觀之內容，避免隱蔽事實。(請參閱附錄一)

#### (二) 環評監督制度：

1. NEPA 或 SEPA 均未訂有專屬環評監督之條款及違反罰責，而係回歸至各相關機關與計畫相關之法令，由各機關依所管法令進行稽查及處分。因各機關均參與環評審查過程，亦提出各自對開發單位之要求及承諾事項，由各機關自行監督其後續執行情形，能更專業而有效率。至於對整體環境之影響情形，則由原環評審查之主導機關定期邀集各相關機關就各自監督情形進行討論，以了解開發案對環境的衝擊程度。
2. 此次參訪並無公眾參與環評監督的實際案例，惟參訪之 Duwamish 河復育計畫，由政府提供部分經費（非全部經費，以為環保團體之自主性）供其聘請專家進行監測之做法，應可提高公眾對機關的信賴度。
3. 因美國並非由 EPA 負責全部中央案件環評審查，EPA 亦僅就其主管法令部份進行稽查監督，故較無面臨監督人員超過其專業領域之情形。如由各機關本職權及所主管法令進行監督時，可能更為及時而有效。

## 附錄一：美國環保署選擇第三團體進行環評之法規、方式及程序

- 一、國家環境政策法（NEPA）執行規章 40 CFR 6.303（附件 1）授權主導機關可選擇第三團體（顧問公司）來執行環評。
- 二、EPA 會與開發單位訂定備忘錄（Memorandum of Understanding, MOU）（範例如附件 2），建立協議 EPA 將選擇合約商（第三團體），而開發單位將支付合約費用。
- 三、合約商（第三團體）選擇程序：

（一）第 1 階段：開發單位必須發布開發計畫要求（Request for Proposal, RFP）徵求顧問公司，並提供回應的顧問公司名單（範例如附件 3）給 EPA 考慮。在 EPA 同意下，開發單位將要求這些顧問公司提出他們的資格聲明（Statement of Qualification, SOQ）。

註：RFP 必須註明選擇顧問公司的評選要項（如附件 4），包括其能力和沒有利益衝突。且 RFP 在發布前必須先經 EPA 審查和同意。

（二）第 2 階段：EPA 將與開發單位協商後，從開發單位送來的顧問公司資格聲明挑選出 3 家可能的合約商，入選的顧問公司將基於 FRP 中所設定的要項來評選，EPA 和開發單位就各自對選擇那一家的意願會求取一致，但 EPA 有最後選擇權，定案後由開發單位與其簽約進行評估。

Responsible Official must notify the applicant promptly that EPA will take appropriate action to ensure that the objectives and procedures of NEPA are achieved (see 40 CFR 1506.1(b)). Such actions may include withholding grant funds or denial of permits.

(e) The Responsible Official must begin the NEPA review as soon as possible after receiving the applicant's EID or draft EA. The Responsible Official must independently evaluate the information submitted and be responsible for its accuracy (see 40 CFR 1506.5).

(f) At the request of an applicant and at the discretion of the Responsible Official, an applicant may prepare an EA or EIS and supporting documents or enter into a third-party contract pursuant to § 6.303.

(g) The Responsible Official must review, and take responsibility for the completed NEPA documents, before rendering a final decision on the proposed action.

✓ § 6.303 Third-party agreements.

(a) If an EA or EIS is to be prepared for an action subject to subparts A through C of this part, the Responsible Official and the applicant may enter into an agreement whereby the applicant engages and pays for the services of a third-party contractor to prepare an EA or EIS and any associated documents for consideration by EPA. In such cases, the Responsible Official must approve the qualifications of the third-party contractor. The third-party contractor must be selected on the basis of ability and absence of any conflict of interest. Consistent with 40 CFR 1506.5(c), in consultation with the applicant, the Responsible Official shall select the contractor. The Responsible Official must provide guidance to the applicant and contractor regarding the information to be developed, including the project's scope, and guide and participate in the collection, analysis, and presentation of the information. The Responsible Official has sole authority for final approval of and EA or EIS.

(1) The applicant must engage and pay for the services of a contractor to prepare the EA or EIS and any associated documents without using EPA financial assistance (including required match).

(2) The Responsible Official, in consultation with the applicant, must ensure that the contractor is qualified to prepare an EA or EIS, and that the substantive terms of the contract specify the information to be developed, and the procedures for gathering, analyzing and presenting the information.

(3) The Responsible Official must prepare a disclosure statement for the applicant to include in the contract specifying that the contractor has no financial or other interest in the outcome of the project (see 40 CFR 1506.5(c)).

(4) The Responsible Official will ensure that the EA or EIS and any associated documents contain analyses and conclusions that adequately assess the relevant environmental issues.

(b) In order to make a decision on the action, the Responsible Official must independently evaluate the information submitted in the EA or EIS and any associated documents, and issue an EA or draft and final EIS. After review of, and appropriate changes to, the EA or EIS submitted by the applicant, the Responsible Official may accept it as EPA's document. The Responsible Official is responsible for the scope, accuracy, and contents of the EA or EIS and any associated documents (see 40 CFR 1506.5).

(c) A third-party agreement may not be initiated unless both the applicant and the Responsible Official agree to its creation and terms.

(d) The terms of the contract between the applicant and the third-party contractor must ensure that the contractor does not have recourse to EPA for financial or other claims arising under the contract, and that the Responsible Official, or other EPA designee, may give technical advice to the contractor.

Subpart D—Assessing the Environmental Effects Abroad of EPA Actions

Authority: 42 U.S.C. 4321, note, E.O. 12114, 44 FR 1979, 3 CFR, 1979 Comp., p. 356.

§ 6.400 Purpose and policy.

(a) Purpose. On January 4, 1979, the President signed Executive Order 12114 entitled "Environmental Effects Abroad of Major Federal Actions." The purpose of this Executive Order is to enable responsible Federal officials in carrying out or approving major Federal actions which affect foreign nations or the global commons to be informed of pertinent environmental considerations and to consider fully the environmental impacts of the actions undertaken. While based on independent authority, this Order furthers the purpose of the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*) and the Marine Protection, Research, and Sanctuaries Act (MPRSA) (33 U.S.C. 1401 *et seq.*). It should be noted, however, that in fulfilling its

responsibilities under Executive Order 12114, EPA shall be guided by CEQ regulations only to the extent that they are made expressly applicable by this subpart. The procedures set forth below reflect EPA's duties and responsibilities as required under the Executive Order and satisfy the requirement for issuance of procedures under section 2-1 of the Executive Order.

(b) Policy. It shall be the policy of this Agency to carry out the purpose and requirements of the Executive Order to the fullest extent possible. EPA, within the realm of its expertise, shall work with the Department of State and the Council on Environmental Quality to provide information to other Federal agencies and foreign nations to heighten awareness of and interest in the environment. EPA shall further cooperate to the extent possible with Federal agencies to lend special expertise and assistance in the preparation of required environmental documents under the Executive Order. EPA shall perform environmental reviews of activities significantly affecting the global commons and foreign nations as required under Executive Order 12114 and as set forth under these procedures.

§ 6.401 Applicability.

(a) Administrative actions requiring environmental review. The environmental review requirements apply to the activities of EPA as follows:

(1) Major research or demonstration projects which affect the global commons or a foreign nation.

(2) Ocean dumping activities carried out under section 102 of the MPRSA which affect the related environment.

(3) Major permitting or licensing by EPA of facilities which affect the global commons or the environment of a foreign nation. This may include such actions as the issuance of EPA of hazardous waste treatment, storage, or disposal facility permits pursuant to section 3005 of the Resource Conservation and Recovery Act (42 U.S.C. 6925), NPDES permits pursuant to section 402 of the Clean Water Act (33 U.S.C. 1342), and prevention of significant deterioration approvals pursuant to Part C of the Clean Air Act (42 U.S.C. 7470 *et seq.*)

(4) Wastewater Treatment Construction Grants Program under section 201 of the Clean Water Act when activities addressed in the facility plan would have environmental effects abroad.

(5) Other EPA activities as determined by OFA and OIA (see § 6.406(c)).

(b) [Reserved].

Responsible Official must notify the applicant promptly that EPA will take appropriate action to ensure that the objectives and procedures of NEPA are achieved (see 40 CFR 1506.1(b)). Such actions may include withholding grant funds or denial of permits.

(e) The Responsible Official must begin the NEPA review as soon as possible after receiving the applicant's EID or draft EA. The Responsible Official must independently evaluate the information submitted and be responsible for its accuracy (see 40 CFR 1506.5).

(f) At the request of an applicant and at the discretion of the Responsible Official, an applicant may prepare an EA or EIS and supporting documents or enter into a third-party contract pursuant to § 6.303.

(g) The Responsible Official must review, and take responsibility for the completed NEPA documents, before rendering a final decision on the proposed action.

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(a) If an EA or EIS is to be prepared for an action subject to subparts A through C of this part, the Responsible Official and the applicant may enter into an agreement whereby the applicant engages and pays for the services of a third-party contractor to prepare an EA or EIS and any associated documents for consideration by EPA. In such cases, the Responsible Official must approve the qualifications of the third-party contractor. The third-party contractor must be selected on the basis of ability and absence of any conflict of interest. Consistent with 40 CFR 1506.5(c), in consultation with the applicant, the Responsible Official shall select the contractor. The Responsible Official must provide guidance to the applicant and contractor regarding the information to be developed, including the project's scope, and guide and participate in the collection, analysis, and presentation of the information. The Responsible Official has sole authority for final approval of an EA or EIS.

(1) The applicant must engage and pay for the services of a contractor to prepare the EA or EIS and any associated documents without using EPA financial assistance (including required match).

(2) The Responsible Official, in consultation with the applicant, must ensure that the contractor is qualified to prepare an EA or EIS, and that the substantive terms of the contract specify the information to be developed, and the procedures for gathering, analyzing and presenting the information.

(3) The Responsible Official must prepare a disclosure statement for the applicant to include in the contract specifying that the contractor has no financial or other interest in the outcome of the project (see 40 CFR 1506.5(c)).

(4) The Responsible Official will ensure that the EA or EIS and any associated documents contain analyses and conclusions that adequately assess the relevant environmental issues.

(b) In order to make a decision on the action, the Responsible Official must independently evaluate the information submitted in the EA or EIS and any associated documents, and issue an EA or draft and final EIS. After review of, and appropriate changes to, the EA or EIS submitted by the applicant, the Responsible Official may accept it as EPA's document. The Responsible Official is responsible for the scope, accuracy, and contents of the EA or EIS and any associated documents (see 40 CFR 1506.5).

(c) A third-party agreement may not be initiated unless both the applicant and the Responsible Official agree to its creation and terms.

(d) The terms of the contract between the applicant and the third-party contractor must ensure that the contractor does not have recourse to EPA for financial or other claims arising under the contract, and that the Responsible Official, or other EPA designee, may give technical advice to the contractor.

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responsibilities under Executive Order 12114, EPA shall be guided by CEQ regulations only to the extent that they are made expressly applicable by this subpart. The procedures set forth below reflect EPA's duties and responsibilities as required under the Executive Order and satisfy the requirement for issuance of procedures under section 2-1 of the Executive Order.

(b) *Policy.* It shall be the policy of this Agency to carry out the purpose and requirements of the Executive Order to the fullest extent possible. EPA, within the realm of its expertise, shall work with the Department of State and the Council on Environmental Quality to provide information to other Federal agencies and foreign nations to heighten awareness of and interest in the environment. EPA shall further cooperate to the extent possible with Federal agencies to lend special expertise and assistance in the preparation of required environmental documents under the Executive Order. EPA shall perform environmental reviews of activities significantly affecting the global commons and foreign nations as required under Executive Order 12114 and as set forth under these procedures.

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(2) Ocean dumping activities carried out under section 102 of the MPRSA which affect the related environment.

(3) Major permitting or licensing by EPA of facilities which affect the global commons or the environment of a foreign nation. This may include such actions as the issuance by EPA of hazardous waste treatment, storage, or disposal facility permits pursuant to section 3005 of the Resource Conservation and Recovery Act (42 U.S.C. 6925), NPDES permits pursuant to section 402 of the Clean Water Act (33 U.S.C. 1342), and prevention of significant deterioration approvals pursuant to Part C of the Clean Air Act (42 U.S.C. 7470 *et seq.*)

(4) Wastewater Treatment Construction Grants Program under section 201 of the Clean Water Act when activities addressed in the facility plan would have environmental effects abroad.

(5) Other EPA activities as determined by OIA and OLA (see § 6.406(c)).

(b) [Reserved].

**MEMORANDUM OF UNDERSTANDING  
BETWEEN THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10 AND PAC RIM COAL, LP**

**I. INTRODUCTION AND PURPOSE**

This Memorandum of Understanding ("MOU") sets out the proposed terms of cooperation between Pac Rim Coal, LP ("Applicant") and the U.S. Environmental Protection Agency Region 10 ("EPA") in the development of a Supplemental Environmental Impact Statement ("SEIS") and other related documents, reports, or evaluations in connection with the issuance of all federal permits and licenses necessary for the development, construction, and operation of the Chuitna Coal Project ("Project") near Tyonek, Alaska. The SEIS and other related documents will comply with all provisions of the National Environmental Policy Act ("NEPA"), as amended, and any and all regulations [especially 40 C.F.R. pt. 1500 *et seq.* and 40 C.F.R. Part 6] and/or guidelines relating to NEPA, together with all local and State laws. Pac Rim Coal, LP is the owner and operator of the Project.

The decision to prepare a Supplemental EIS is made pursuant to 40 C.F.R. § 1502.9 and the Council on Environmental Quality ("CEQ") Forty Most Asked Questions (No. 32). The previous EIS for the Project was completed in February 1990. During development of the SEIS, all relevant information from the previous EIS will be incorporated to the maximum extent possible. The SEIS will be a stand-alone document.

**II. GENERAL PROVISIONS**

- A. EPA is the lead agency for the development of the SEIS and is ultimately responsible for assuring compliance with the requirements of NEPA.
- ✓ B. The Applicant will retain a Consultant, selected by EPA, to provide the supportive expertise, personnel, and technical capabilities required for the development of the SEIS and associated technical analyses. Any subcontractors retained by the Consultant will be subject to the same responsibilities and restrictions of the MOU as the Consultant.

The process for selecting the Consultant shall be as follows:

1. A pool of three potential Consultants shall be selected by EPA, in consultation with the Applicant, from all firms responding to a request for a Statement of Qualifications ("SOQ").
2. The Applicant shall prepare a request for proposals ("RFP") to solicit proposals from the three potential Consultants. The RFP shall specify selection criteria, covering both ability and the absence of any conflict of interest. The RFP shall be reviewed and approved by EPA before release.

3. The final selection of the Consultant will be based on the criteria set forth in the RFP.

4. Every attempt will be made to reach a consensus<sup>一致</sup> between EPA and the Applicant as to which offeror should be selected as the Consultant. However, EPA has the final selection responsibility.

C. The contract between the Applicant and the Consultant, and any subcontracts thereunder, shall be consistent with the provisions of this MOU and shall specifically incorporate the provisions herein that address the conduct of the Consultant. The contract shall provide that the Consultant and all employees assigned to this project do not, and will not, have any financial interests in the planning, approval, design, construction, or operation of the proposed Project except with regard to the preparation of the SEIS and/or other environment-related studies on this Project commissioned by EPA. Further, the contract with the Consultant and the contract of any subcontractor engaged to conduct any work related to this MOU will specifically state that neither the United States nor its officers or agents is a party thereto and accordingly will not be liable in any manner to the Consultants or subcontractors for costs arising out of any termination of the contract(s) or the MOU. <sup>另外</sup>

D. The contract between the Applicant and the Consultant will require prompt performance and completion of the work with the final responsibility for ensuring prompt performance and completion of the SEIS to rest with EPA. Further, the Applicant will coordinate and facilitate the exchange of information related to the planning, design, and construction of the Project, as it relates to the preparation of the SEIS, among the Applicant's in-house staff and EPA representatives, and representatives of other agencies involved in licensing the Project, the Consultant and others employed by the Applicant for the development of the SEIS.

E. The Applicant and EPA shall:

1. Participate in all substantive phases of the SEIS preparation, including:
  - a. Baseline data review
  - b. Scoping
  - c. Alternatives development
  - d. Technical reports review
  - e. Impacts analyses
  - f. Preliminary Draft SEIS ("PDSEIS") review
  - g. Draft SEIS ("DSEIS") review
  - h. Final SEIS ("FSEIS") review

Participation in such reviews shall be limited in the first instance to the parties to this MOU and their cooperating or associated agencies. Subsequent to initial review by the parties, the parties may agree to allow review by other interested agencies. EPA, in its Tribal trust responsibility, will request Tribal

government-to-government reviews of draft documents subsequent to initial review by the parties and cooperating agencies.

2. Designate representatives to review all SEIS work as it is developed and completed.
  3. Have their respective representatives participate in regular meetings or conference calls with federal, State, regional, and local agencies for the purpose of increasing communication and receiving comments, in preparation of the SEIS.
- F. All costs incurred in connection with the employment of the Consultant or any other entity participating in the preparation of the SEIS under contract with the Applicant will be the sole responsibility of the Applicant. The Applicant agrees to hold harmless and indemnify EPA with respect to any and all claims, demands, causes of action, and the like which may arise from the performance, termination or breach of the consulting contract, or any other services or purchases of materials used for the preparation of the SEIS. In the event of a lawsuit concerning the adequacy under NEPA of the Final SEIS, the Applicant has no obligation to defend the lawsuit or reimburse EPA for its efforts to defend the lawsuit. The Applicant and/or its Consultants/Contractors shall, however, cooperate in the defense and provide witnesses where appropriate.
- G. EPA will be the lead agency for the SEIS as defined at 40 C.F.R. § 1508.16 and will assign qualified staff people to work on the matters covered by this agreement. It will carry out its activities relating to the Project in an expeditious manner and in conformity with applicable laws and regulations.

### III. PROCEDURES

- A. The Consultant shall be responsible for submitting draft Phase I and Phase II Plans of Study ("POS's") to EPA and the Applicant as set forth below. After receiving instructions, if any, from EPA, the Consultant shall prepare the Phase I and Phase II POS's and submit them to EPA and the Applicant for EPA's approval which reflect and respond to these instructions.

1. Phase I: Baseline Data Review, Previous EIS Review, Scoping, Preliminary Draft SEIS Preparation, and Draft SEIS Preparation.

Within fourteen (14) days of direction from EPA, the Consultant shall provide EPA and the Applicant with a draft Phase I POS describing the work necessary to complete scoping, to prepare the Preliminary Draft SEIS for internal agency and Tribal review, and to prepare the Draft SEIS for public notice and comment. As part of the process of developing the Preliminary Draft SEIS, EPA will hold scoping meetings to determine the scope of the

SEIS. The Consultant shall prepare a report outlining the results of the scoping meetings which shall be jointly reviewed by EPA and the Applicant.

**2. Phase II: Final SEIS Preparation.**

At the close of the Draft SEIS review and comment period, EPA and the Consultant shall identify the issues and comments submitted that will require responses in the Final SEIS. After these discussions, the Consultant shall submit the Phase II POS describing the work for developing the Final SEIS in a manner that is responsive to the comments received. After receiving approval of the Phase II POS, the Consultant will proceed with the development of the Final SEIS. EPA may modify the Consultant's proposed responses to comments as it determines necessary.

- B. The Phase I and Phase II POS's may be amended as necessary by EPA, in consultation with the Applicant, to reflect new issues developed during the scoping process and at any other time during the SEIS process. Such amendments will be made whenever EPA determines that they are necessary in order to ensure that the SEIS fully complies with the requirements of applicable law and regulations.
- C. Any and all work performed by the Consultant in preparation of the SEIS, including, but not limited to, draft documents and data analyses, shall be submitted directly to EPA by the Consultant. Simultaneously, the Consultant will furnish copies of its work to the Applicant, but in no case will the Applicant review, modify, or edit the Consultant's work prior to its submission to EPA, or be provided the opportunity to do so.
- D. EPA reserves the right to review periodically and modify the work of the Consultant, or order such modifications, to ensure that all legal requirements of NEPA are satisfied. The Consultant shall submit monthly progress reports to EPA and the Applicant. Each report will address the present status of each task, any problems encountered and how these problems are being resolved, any recommendations for modifications to the Phase I or Phase II POS, and any changes made in personnel or methodology. The report shall also summarize the expenditure of resources-to-date in terms of labor, effort, and dollars and shall be submitted no later than the tenth day of the month following the month it covers.
- E. As each portion of any draft or final document is completed, the responsible EPA official shall review such portion and those tasks completed thereunder and shall be given an opportunity to approve, modify, or comment thereon or direct further work with regard to such portion or tasks. Approval of any portion of the work product is contingent upon approval of the final work product in its entirety. Such directions or comments will be made by EPA within 30 working days of receiving the draft work product. The Consultant shall incorporate the EPA comments into the text of the relevant document or address said comments by making appropriate changes in the relevant documents. Final drafts of any documents will be submitted, as prepared, to EPA and

the Applicant for review and to EPA for approval. EPA shall have sole authority for approval and modification of the statements, analyses, and conclusions in the SEIS, pursuant to 40 C.F.R. § 6.604(g)(3)(iii).

- F. In all instances involving questions as to the content or relevance of any material (including all data, analyses, and conclusions) prepared by the Consultant, EPA will make the final determination on the inclusion or deletion of any such material in documents produced for the SEIS; provided, however, that where explicitly permitted by NEPA regulations governing the preparation of an SEIS, the Applicant or the Consultant may supplement by addendum any material included or excluded by direction of EPA from the text of any given report.
- G. The Applicant shall direct the Consultant to provide, to the extent requested by EPA, access to and review of all procedures and underlying data used by the Consultant in developing any and all reports, including, but not limited to, field reports, subcontractor reports, and interviews with concerned private and public parties, whether or not such information may be reflected in a draft or final report submitted to EPA.
- H. Joint meetings between the Applicant, EPA, the cooperating agencies, and the Consultant will be held to coordinate the SEIS preparation. However, EPA reserves the right to work directly with the Consultant for purposes of assuring objectivity or for assuring expeditious communications. When meetings or conversations on significant matters occur between EPA and the Consultant without the participation of the Applicant, the Consultant shall furnish written documentation to the Applicant of these events, with a copy to EPA. The Applicant shall not direct the modification, exclusion, or inclusion of any data, evaluations, or other material in the SEIS or any other report being prepared by the Consultant or its subcontractors for this Project. EPA further reserves the right to consult directly and independently with other federal, state, and local officials during SEIS preparation to assure compliance with NEPA, as well as with all other applicable laws and regulations.
- I. The Applicant will ensure the full cooperation of the Consultant and all subcontractors with respect to participation in any public workshops, hearings, meetings, and the like, as required by EPA to foster public familiarity or participation with respect to the assessment of impacts related to the Project.
- J. With respect to all reports and documents, including the Preliminary Draft, Draft, and Final SEISs, the Applicant shall be responsible for the costs of stenographic, clerical, graphics, printing, and the like. The Applicant's contract with the Consultant shall provide for the Consultant delivering at least ten (10) copies of all preliminary draft, draft, and final reports, exclusive of the Preliminary Draft, Draft, and Final SEISs, to EPA. The Applicant's contract with the Consultant shall also require the Consultant to deliver twenty (20) copies of the Preliminary Draft SEIS, Draft SEIS, and the Final SEIS, including one "camera-ready" copy of each, suitable for reproduction and distribution, to EPA, and in addition, adequate copies as specified by EPA, for public

distribution. The Applicant will be solely responsible for all of the aforesaid costs in preparing and providing these copies to EPA.

- K. Upon completion of the Draft SEIS, EPA will be responsible for organizing and conducting any public hearing under 40 C.F.R. § 6.400 and 40 C.F.R. § 1506.6. EPA will also be the recipient of all comments during the Draft SEIS review and comment period and shall provide copies of such comments to the Applicant. This period (at least forty-five days) will be initiated when EPA's Office of Federal Activities in Washington, D.C. publishes the Draft SEIS "Notice of Availability" in the Federal Register.
- L. In order to provide the necessary documentation for the administrative record, the Consultant must document the sampling, testing, field observations, literature searches, analyses, recommendations, conclusions, and other work which provide source material for the Draft SEIS and Final SEIS. Such documentation must be assembled in an organizational system which will enable the Draft SEIS and Final SEIS to refer conveniently to specific documents and pages within documents. The source documents must be listed. The list must show the date, author, addressee, subject, and document or page number. The list must be an appendix to the Draft SEIS and Final SEIS. The Draft SEIS and Final SEIS must be footnoted in appropriate text locations to the source materials. A complete copy of the record must be submitted to EPA with the Draft SEIS. Any documents added to the source materials after the Draft SEIS is prepared must be included in the set of documents and list and a complete copy submitted to EPA with the Final SEIS. All such documents and the list must be available for review and correction by EPA upon request by an authorized EPA representative.

#### IV. TERMINATION

- A. Either party to the MOU may terminate this agreement upon thirty (30) days advance written notice to the other party.
- B. In the event of a termination of the MOU or the consulting contract, it is agreed as follows:
  - 1. The Applicant will ensure that copies of all documentation, reports, analyses, and data, developed by the Consultant are delivered promptly to EPA.
  - 2. The Applicant will hold harmless EPA and its officers, agents, and employees, from any claims, demands, causes of action and the like, which may arise from such a termination by Applicant, and will indemnify EPA and its officers, agents, and employees for any losses arising therefrom (other than administrative or legal costs of EPA itself).

## V. DISPUTE RESOLUTION

- A. If, after good faith effort by representatives of both parties, a dispute arising as a result of this MOU cannot be resolved, the Regional Administrator may require written or oral arguments to be presented on the issue.
- B. After presentation of the arguments, the Regional Administrator will render a final decision. The decision shall be binding on the parties.

## VI. MODIFICATION

The MOU may be modified by the parties hereto only by a mutually agreed upon written amendment.

## VII. MISCELLANEOUS

- A. EPA shall maintain the confidentiality of all information, documents, or material which the Applicant designates as confidential and meets the criteria of EPA's regulations for confidentiality.
- B. In executing this MOU, the Applicant is not waiving any administrative or judicial right it may otherwise have.
- C. Any notice required or permitted under this MOU must be in writing or by an electronic medium, producing a permanent record, and must be given personally or by a registered or certified mail, return receipt requested, addressed as follows to the party's designated representative:

TO THE EPA:  
Regional Administrator  
Environmental Protection Agency  
Region 10  
1200 Sixth Avenue  
Seattle, WA 98101

TO THE APPLICANT:  
DRven Corporation  
ATTN: Robert B. Stiles  
711 H. Street, Suite 350  
Anchorage, AK 99501

Fax: (206) 553-1809

Fax: (877) 817-7640

Either party may, by prior written notice to the other party, change its notification address or its designated representative.

- D. This MOU will be effective as of the last date signed below.
- E. This instrument has been executed in multiple counterparts, all of which are identical, and each of which should be deemed an original, and all of which constitute one and the same instrument.
- F. This agreement shall be interpreted in accordance with federal law.

UNITED STATES  
ENVIRONMENTAL PROTECTION  
AGENCY, Region 10

By Ron Kreizenbeck  
Deputy Regional Administrator

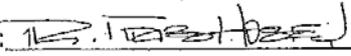
Date: March 8, 2006

By: 

Pac Rim Coal, LP

By: PacRim Coal - GP, LLC, its  
general partner

Date: March 13, 2006

By: 

R. Fred Hosey, Secretary

(附件 3)



March 15, 2006

Hanh Shaw  
NEPA Compliance Coordinator  
Office of Water Region 10  
Environmental Protection Agency  
1200 Sixth Avenue  
Seattle, WA 98101

Dear Ms. Shaw:

The following is a list of potential third party contractors that may be appropriate to assist with preparation of the Supplemental Environmental Impact Statement for the Chuitna Coal Project:

- (1) URS  
Contact: Jody Rozkydal
- (2) Michael Baker, Jr., Inc.  
Contact: Jeff Baker
- (3) ENSR  
Contact: Chris Humphrey
- (4) CH<sub>2</sub>M/Hill  
Contact: Diane Draper
- (5) The Shaw Group  
Contact: Laura Noland
- (6) MWH Americas, Inc.  
Contact: Brett Jokela
- (7) Entrix  
Contact: Michael D. Nagy
- (8) Tetra Tech Inc.  
Contact: Don Baird

With your concurrence, we would like to transmit the request for Statement of Qualifications to each of these firms concurrent with transmittal to EPA of the executed MOU.

Respectfully,

A handwritten signature in black ink, appearing to read "Robert B. Stiles". The signature is fluid and cursive.

Robert B. Stiles

W. Herbert Hunt  
3400 Thanksgiving Tower  
Dallas, Texas 75201  
Tel. (214) 880-8482  
Fax (214) 880-7101  
Em. whhunt@petro-hunt.com

Robert B. Stiles  
711 H. St., Suite 350  
Anchorage, Alaska 99501  
Tel. (907) 276-6868  
Fax (877) 817-7640  
Em. rbstiles@gci.net

(附件 4)

Your technical proposal should cover the components described below. Each section of the technical proposal should be limited in length to the number of pages indicated. A portion of the evaluation will be based on the adherence to this length.

I. Experience and Qualifications [25 points; Pages: 10]

The proposal should describe the experience and qualifications of your firm and those individuals, including subcontractors, who would work on the Chuitna Coal Project Supplemental Environmental Impact Statement (SEIS). Experience should be discussed by category as follows:

- A. The Project Manager's and Project Team's previous EIS or environmental analysis experience on mining projects, preferably in Alaska. The Project Manager's experience and understanding of analyzing projects under the Alaska Surface Coal Mining Control and Reclamation Act (ASCMCRA), experience and understanding of analyzing projects under other federal and state permitting requirements for coal mines, experience and understanding of Tribal issues in Alaska, experience and understanding of subsistence issues and requirements in Alaska, experience and understanding with the Marine Mammal Protection Act and the permitting process thereunder, and Endangered Species Act (ESA) consultation.
- B. Other EIS, environmental analysis, permitting and coordination/consultation experience with other agencies, that illustrate your firm's ability to manage issues similar to those associated with the proposed project.
- C. Resumes of all personnel, including subcontractors who would work on the SEIS. For subcontractors, indicate the extent to which they would be used.
- D. A list of references.

II. Project Management [20 points; Pages: 10]

The proposal should describe your system for the management of personnel, project tasks, and assigned workloads. This discussion should include the following:

- A. A description of your procedures for interacting within your

organization and with subcontractors (include organization chart that lists the physical office location of all personnel who would be working on the project).

- B. A description of your proposed procedures for interacting with the lead agency, the cooperating agencies, and PacRim Coal, LP and its representatives.
- C. Identify how your management procedures on previous projects have resulted in timely project completion, and specifically, how schedules initially developed were met.
- D. Identify the Project Manager's dedication of man-hours to this project and ability to ensure timely project completion.
- E. Describe the documents control and records management system that would be used for this project.

III. Approach to the Project SEIS [30 points; Pages: 15]

Based on the project descriptions provided to you by PacRim Coal, LP, representatives, describe your proposed methods for completing the SEIS. Early project milestones to be met by the contractor include:

- Review the previous Project EIS (Diamond Chuitna Coal Project FEIS) to identify data gaps and recommend the types of information that should be carried forward in the SEIS.
- Review the environmental baseline data and make recommendations regarding any additional data needs.
- Prepare a detailed plan of study for the SEIS process.
- Prepare a draft and final scoping document.

Your discussion should include:

- A. A description of the major tasks and subtasks involved in preparing all phases of the SEIS.
- B. Your perception of the major issues associated with the Project and how you would deal with them.
- C. Your approach to the scoping of the SEIS.
- D. Your approach to agency interaction in the development of

the SEIS, including the ESA consultation process.

- E. Your approach to the Tribal coordination and public participation processes.
- F. Your approach for reviewing the adequacy of the baseline data and the previous Project EIS.

IV. Problem Solving Example [15 points; Pages: 5]

Describe a complex situation your firm has encountered in the preparation of an EIS or other major environmental report, preferably on a mining project and how you dealt with it.

V. Writing and Editing Ability [10 points; Pages: N/A]

The quality of the technical proposal prepared by the offeror will be reviewed based on the following factors:

- A. The degree to which the proposal is a coherent document in which each section relates clearly to the whole.
- B. The degree to which the proposal is concise, to the point, and makes effective use of graphics.
- C. The degree to which the presentation is understandable to a lay audience.

VI. Your cost proposal should cover the components described below. It should provide a complete breakdown of anticipated cost by task and subtask, including overhead (direct and indirect), travel and equipment costs to completing the SEIS. List all assumptions.

- I. A not-to-exceed estimate for all work through draft scoping document (200 copies), scoping meetings, final scoping document, Preliminary Draft SEIS issuance (50 copies) for internal and Tribal review and issue resolution; Draft SEIS issuance (150 copies), public hearings support, and summary/index of public comments.
- II. A non-binding estimate for all work needed after I, above, for complete preparation of the Final SEIS.

Your proposal must be received no later than 3:00 PM, ADT on \_\_\_\_\_.  
Please submit the proposal electronically to each of the following addresses  
below.

|  |  |
|--|--|
| TO THE EPA.  | TO THE COMPANY   |
| U.S. Environmental Protection Agency                                     | PacRim Coal, LP.                                       |
| Hanh Shaw, Project Manager   | Robert B. Stiles                                       |
| <a href="mailto:Shaw.Hanh@epamail.epa.gov">Shaw.Hanh@epamail.epa.gov</a> | <a href="mailto:rbstiles@gci.net">rbstiles@gci.net</a> |

We look forward to receiving your proposal.

Sincerely,

PACRIM COAL, LP.

Name  
Title

## 附錄二：美國環保署為 Lead Agency 進行環評審查之 Pogo Mine Project 環說書定稿本中有關環評書件發展程序之摘錄。

### 1.4 EIS Development Process

The Applicant has applied to the U.S. Environmental Protection Agency (EPA) for a National Pollutant Discharge Elimination System (NPDES) permit to discharge waste waters from the Pogo mine project from an off-river treatment works to a channel connected to the Goodpaster River. This project is considered a "new source" discharge and, in accordance with Section 511(c)(1) of the Clean Water Act (CWA), is subject to the provisions of the National Environmental Policy Act (NEPA). Because the proposed project has the potential to significantly affect the quality of the human environment, the decision on issuance of the NPDES permit is considered a "major federal action." NEPA requires preparation of an environmental impact statement (EIS) for all major federal actions.

The NEPA compliance program requires analysis of information on potential impacts, including environmental, cultural, social, economic, and public health impacts; development and analysis of options to avoid and minimize impacts; and development and analysis of measures to mitigate adverse impacts. EPA's NEPA compliance responsibilities include several statutes and executive orders that must be addressed during the NEPA process. Examples include the Endangered Species Act, the Executive Order on Environmental Justice, and executive orders on wetlands, floodplains, farmland, biodiversity, and tribal government coordination and consultation. The Council of Environmental Quality (CEQ) regulations for implementing NEPA may be found in the U.S. Code of Federal Regulations (CFR), Title 40, Parts 1500-1508. The EPA's regulations on compliance with NEPA are located in 40 CFR 6. After completing the final EIS, EPA will prepare a record of decision (ROD) that sets forth EPA's basis for issuing or denying the NPDES permit.

In the fall of 1997, the Applicant began discussions with various state and federal agencies about underground exploration permits, and later initiated pre-development discussions. In June 2000, Teck-Pogo Inc., as prospective Applicant for the project's NPDES permit, entered into a Memorandum of Understanding (MOU) with EPA that established the conditions and procedures to be followed in preparation of the EIS. On August 1, 2000, the Applicant filed an application for an NPDES permit to discharge waste waters to a soil absorption system and to underground injection wells on the Goodpaster River Valley floor. This application formally commenced the EIS process. On January 2, 2003, the Applicant filed an amended NPDES application to discharge waste waters from an off-river treatment works on the Goodpaster River Valley floor to a channel connected to the Goodpaster River.

EPA has assumed lead federal agency responsibility for preparation of the EIS and, in accordance with its implementation of NEPA regulations, has determined that it will prepare the EIS with the use of a third-party contractor. The EPA and Applicant MOU provided for engaging a third-party contractor to develop the EIS under the direction of EPA. A third-party contractor supplies technical expertise and other assistance directly to a federal agency. The contractor works under that agency's direct supervision and not for the Applicant. The costs for the contractor's services are reimbursed by the Applicant under the terms of the MOU. Michael Baker, Jr., Inc., a large international engineering and environmental firm with a strong presence in Alaska, was selected as the third-party contractor in June of 2000, and immediately commenced work. The contractor has no financial interest in the outcome of the project and has filed a formal Statement of Financial Interest (SOFI) to that effect.

Additional information about the Pogo Mine EIS process, including baseline reports and technical documents, can be found on the Web at <http://www.pogomineeis.com>.



### **Cooperating Agencies**

In order to construct and operate the mine, many federal and state permits are needed. Therefore, the EIS has been prepared with EPA as the lead agency and the U.S. Army Corps of Engineers (COE) and State of Alaska Department of Natural Resources (ADNR) as cooperating agencies. This EIS may be used by agencies as a basis for a permit decision-making process and their own ROD or other appropriate procedure. The authorities under which this action is being proposed are listed in Section 1.7 (Agency Roles and Responsibilities).

## **1.5 Scoping**

As required by the CEQ regulations (40 CFR 1501.7) and EPA regulations (40 CFR 6.400), EPA provided for an early and open process to determine the scope of issues to be addressed and to identify the significant issues related to the Pogo Mine project. EPA accomplished these objectives through early public, tribal, and agency involvement in regular meetings, and by conducting a thorough public and agency scoping process.

On August 11, 2000, EPA published a Notice of Intent (NOI) to prepare an EIS for the Pogo Mine Project in the *Federal Register* (FR). On the same date, EPA distributed the *Scoping Document for the Pogo Mine Project Environmental Impact Statement* (EPA, 2000) that described the proposed project, the EIS process, and a document preparation schedule. Distribution of the scoping document began a 60-day public and agency review and comment period that ended on October 10, 2000. EPA hosted two scoping open houses during that period. The first was held on September 26, 2000, in Delta Junction at the Delta Junction Community Center, and the second was held on September 27, 2000, in Fairbanks at the Noel Wien Library. Attendance totals were 46 and 50, respectively.

The scoping open houses served two purposes. One was to listen to and record the public's comments about the proposed project as described in the scoping document. The second was to respond to the public's requests for the background information and hands-on technical assistance that might be needed to fully understand the project description and proposed scope of the EIS analysis before commenting. EPA project staff, other agency representatives, and members of the third-party contractor, Michael Baker, Jr., were available to answer questions and explain methodologies.

A "town meeting" format provided an opportunity for individuals to comment and promoted group interaction. All comments made during the open houses, whether oral or written on comment sheets or flip charts, were documented as part of the official record. While people were welcome to make comments and suggestions during the open houses, the record was specifically left open for an additional 13 days to accommodate anyone needing additional time to formulate comments.

Sixty-two sets of comments were received, excluding those received during government-to-government consultations. In five of these cases, individuals gave very similar comments on two or more occasions, usually orally and in writing. Thus, 57 individual sets of non-tribal comments were received. Because some written comments were signed by more than one individual or organization, 64 entities actually commented. EPA will accept public comments throughout preparation of this EIS.

On January 30, 2001, EPA distributed a 55-page *Pogo Mine EIS Scoping Responsiveness Summary* (EPA, 2001a). This document described the scoping process, and:



- Included 17 pages of representative public and agency comments as well as 4 pages of tribal comments
- Described how the comments were evaluated
- Listed the 17 issues identified by the scoping comments
- Identified the project's component options to address those issues
- Described how evaluation criteria were developed for the issues and how those criteria would be used to evaluate the component options and identify project alternatives to be analyzed in the EIS
- Discussed activities that would follow the scoping process and identified sources of information
- Presented an EIS/NPDES permitting process and time line diagram
- Presented a draft EIS table of contents

### **Government-to-Government Consultations**

In addition to the EIS scoping effort, pursuant to Executive Order 13084 (Consultation and Coordination with Indian Tribal Governments), EPA undertook a concerted government-to-government consultation effort with the 13 Tribes listed below. These Tribes were considered to be potentially affected by the proposed Pogo Gold Mine by virtue of their location (1) within a 125-mile radius of the proposed Pogo Mine site, or (2) within the potentially affected Tanana River watershed. A detailed description of this consultation process is contained in Section 7.13 of this EIS.

|                               |                              |
|-------------------------------|------------------------------|
| Circle Native Community       | Native Village of Tanana     |
| Dot Lake Village Council      | Nenana Native Village        |
| Healy Lake Tribal Council     | Northway Traditional Council |
| Manley Village Tribal Council | Tanacross Village Council    |
| Mentasta Traditional Council  | Tetlin Village Council       |
| Native Village of Eagle       | Tok Traditional Council      |
| Native Village of Minto       |                              |

## **1.6 Issues and Concerns**

The scoping comments identified 17 major issues related to construction, operation, and closure of the proposed project. These issues served as the basis for development of criteria that were used to evaluate the various project options and alternatives, as described in Chapter 2. The 17 issues identified from public, agency, and tribal scoping comments were:

- Surface and groundwater quality
- Wetlands
- Fish and aquatic habitat
- Wildlife
- Recreational resources and uses
- Existing privately-owned lands and existing recreational and commercial uses
- Subsistence and traditional uses



- Air quality
- Noise
- Safety
- Reclamation
- New industrial and commercial uses
- Cultural resources
- Socioeconomics
- Cumulative impacts
- Technical feasibility
- Economic feasibility

## 1.7 Draft EIS Public Comments and Responses

The draft EIS comment period formally began with a notice of availability published in the *Federal Register* on March 14, 2003, and closed 60 days later on May 13, 2003, although comments received after the closing date have been considered and responded to. In addition, public meetings during which comments and testimony were taken were conducted in Delta Junction on April 29, 2003, and in Fairbanks on April 30, 2003.

The 184 commenters made a total of approximately 641 comments. These figures do not include comments received during government-to-government consultations discussed above. All public and agency comments, and responses to them, are contained in Appendix E of this final EIS.

## 1.8 Agency Roles and Responsibilities

### 1.8.1 Responsible Official and Decision to Be Made

The Pogo Mine project requires a NPDES permit for project-related water discharges. The project is defined as a new source by the NPDES regulations (40 CFR 122.2 and 122.29). Under the CWA Section 511(c)(1), a new source is subject to compliance with NEPA prior to taking a final action on the NPDES permit (40 CFR Part 6, Subpart F). Thus, EPA is following a specific procedure that began with scoping and data collection and continues with analysis of data to identify and evaluate alternatives. The results of these analyses are documented in this EIS and form the basis for EPA's decision on the NPDES application. EPA's Region 10 Administrator is the responsible official for this decision.

The responsible official may decide to adopt:

- The No Action Alternative
- One of the action alternatives
- An alternative that combines features of more than one alternative
- One of the action alternatives with additional mitigation measures

EPA's ROD documenting the EIS conclusions will result in a decision on the Applicant's NPDES permit application. EPA will approve or deny the application, or require that the Applicant revise its proposed project prior to approval.

The Pogo Mine project requires a Clean Water Act Section 404 permit for discharge of dredged and/or fill material into waters of the U.S., including wetlands, prior to conducting the work (33 U.S.C. 1344). The impact on waters of the U.S. has been documented in this EIS and will be the basis for the COE decision on the Applicant's Section 404 permit application. The alternatives



analysis contained in this EIS will be the basis for determining compliance with the EPA's Section 404 (b)(1) guidelines.

The State of Alaska will use this EIS to assist in its separate permit adjudication process, and will make its determinations on a schedule coordinated with the EIS process. If EPA were to decide against issuance of a NPDES permit, the state could still issue its authorizations if the project was redesigned so that an NPDES permit would not be required.

## 1.8.2 Agency Roles and Responsibilities (Permits and Approvals)

Preparation of this EIS and the permitting process are related but also distinct activities. The EIS is designed to explore project alternatives and discuss relative environmental impacts. Permitting gives government decision-makers a process to enforce certain conditions that are mandated by statute or regulation, and to require individual stipulations to eliminate or mitigate project-specific adverse environmental impacts identified in the EIS.

Many federal and state permits and approvals would be required for the Pogo Mine Project. Following is a list of the agencies involved in permitting, consultations, or otherwise providing authorizations for the project, with a description of their major permits, authorizations, or authorities. A succinct list of the major permits and authorizations required for project development is contained in Chapter 9.

### **Federal Government**

#### **Environmental Protection Agency (EPA)**

- Section 402 NPDES Water Discharge Permit
- Section 404 Permit Review
- Spill Prevention, Control, and Countermeasure (SPCC) Plan
- Stormwater Construction and Operation Permit
- Underground Injection Control (UIC) Permit
- Section 106 Historical and Cultural Resources Protection
- ✦ **Section 402 NPDES Water Discharge Permit.** Sections 301 and 306 of the CWA require that EPA develop wastewater effluent standards for specific industries, including gold mines. These standards are established both for existing sources and new sources. Because the project is a new source, New Source Performance Standards (NSPS) for gold mines and mills are applicable to the project (40 CFR 440.104). Section 402 of the CWA requires that the Pogo Mine project obtain an NPDES permit for its proposed discharge. The NPDES permit would be required to meet the NSPS or the water quality standards, whichever provides the more stringent limitation.

In accordance with Section 511(c)(1) of the CWA, NPDES permit actions for new sources are subject to NEPA (40 CFR Part 6, Subpart F). Therefore, EPA would issue a ROD before the final permit action.

EPA is the NPDES permitting authority in Alaska. The Alaska Department of Environmental Conservation (ADEC), pursuant to Section 401 of the CWA, must provide certification to EPA that the discharge would comply with any applicable



state water quality standards. The ADEC certification determines whether wastewater mixing zones are, or are not, permitted.

- + **Section 404 Permit Review.** Section 404 of the CWA authorizes the COE to issue permits for the discharge of dredged or fill materials into waters of the United States (described below). EPA, under Section 404(c), has a review authority and may prohibit or withdraw the specification (permitting) of a site upon a determination that the use of the site would have an unacceptable adverse effect on municipal water supplies, shellfish beds and fisheries areas, or recreational areas.
- + **Spill Prevention, Control, and Countermeasure (SPCC) Plan.** Section 311 of the CWA establishes requirements relating to discharges or spills of oil or hazardous substances. Discharges or spills of oil in "harmful quantities" are prohibited. EPA has established a requirement for the preparation of an SPCC Plan by facilities that handle substantial quantities of oil (40 CFR 112). A registered engineer must certify the plan.
- + **Stormwater Construction and Operation Permit.** Under Section 402(p) of the CWA, EPA has promulgated regulations for control of stormwater runoff. For the Pogo Mine project, these sources would include runoff from roads, laydown areas, the mill and camp sites, and other surface disturbances. The EPA approach to this type of discharge is generally to require implementation of best management practices (BMPs). If an NPDES permit is needed for the project, the stormwater control requirements from the NPDES program may be incorporated into the NPDES permit.
- + **Underground Injection Control (UIC) Permit.** The UIC program is authorized by Part C of the Safe Drinking Water Act (SDWA), Public Law 93-523, and Amendments. Injection wells are defined broadly to include boreholes, sumps, dry wells, drain fields, and other subsurface disposal devices used to put fluids into the ground. The Class V category consists of injection wells that are not included in the other classes of wells (e.g., Class I, II, or III). EPA will determine whether any discharge in the proposed project will be covered by a Class V UIC permit.
- + **Section 106 Historical and Cultural Resources Protection.** Under Section 106 of the National Historic Preservation Act, as lead federal agency EPA is responsible for ensuring overall protection of historical, cultural, and archaeological sites and resources for the Pogo Mine project. This role would include consultation with the State Historic Preservation Office (SHPO) within the ADNR.
- + **Hazardous Waste Generator Identification Number.** Under the Resource Conservation and Recovery Act (RCRA), an entity that generates hazardous wastes must register and receive an identification number before commencing operations.

#### U.S. Army Corps of Engineers (COE)

The COE is a cooperating agency with EPA for the Pogo Mine project EIS.

- Section 404 Dredge and Fill Permit
- Section 106 Historical and Cultural Resources Protection
- + **Section 404 Dredge and Fill Permit.** Section 404 of the CWA authorizes the COE to issue permits for discharge of dredged or fill material into waters of the United States, including wetlands. The CWA prohibits such a discharge, except pursuant to a Section 404 Permit. To the degree that they affect "waters of the United States,"



various activities undertaken in connection with mining operations might require a Section 404 Permit (including road or bridge construction, construction of dams for tailings storage, water storage dams, and stream diversion structures).

The COE is responsible for determining that the proposed project is in compliance with Section 404(b)(1) guidelines (40 CFR 203). Under Section 404(c), EPA has review authority over the COE 404 Permit decisions.

- + **Section 106 Historical and Cultural Resources Protection.** Under Section 106 of the National Historic Preservation Act, the COE is responsible for ensuring protection of historical, cultural, and archaeological sites and resources for the Pogo Mine project within the COE's permit area. This role would include consultation with the SHPO.

#### National Marine Fisheries Service (NMFS)

- Threatened and Endangered Species Act (ESA) Consultation (Section 7)
- Essential Fish Habitat
- Fish and Wildlife Coordination
  - + **Threatened and Endangered Species Consultation (Section 7).** EPA must conduct an ESA Section 7 consultation with the National Marine Fisheries Service (NMFS) regarding any threatened or endangered species under its jurisdiction that may be affected by the proposed project. The level of required informal or formal consultation would depend on whether listed species occur in the project area, and, if so, whether they likely would be affected by the proposed project. If listed species occur in the area and they likely would be affected, EPA and NMFS would undergo the formal consultation process. This is typically an involved process that results in measures designed to minimize the impact of the project on listed species.
  - + **Essential Fish Habitat.** In a similar manner, EPA must consult with NMFS concerning any action that might adversely affect essential fish habitat (EFH). EFH includes habitats necessary to a species for spawning, breeding, feeding, or growth to maturity. EPA will provide NMFS with an EFH assessment.
  - + **Fish and Wildlife Coordination.** The NMFS also provides technical expertise and makes comments and recommendations to federal agencies via the Fish and Wildlife Coordination Act (United States Code [USC], Title 16, Section 661 *et seq.*).

#### U.S. Fish and Wildlife Service (USFWS)

- Threatened and Endangered Species Consultation (Section 7)
- Bald Eagle Protection Act Clearance
- Migratory Bird Protection
- Fish and Wildlife Coordination
  - + **Threatened and Endangered Species Consultation (Section 7).** EPA must conduct an ESA Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) regarding any threatened or endangered species under its jurisdiction that may be affected by the proposed project. The level of required informal or formal consultation would depend on whether listed species occur in the project area, and, if so, whether they likely would be affected by the proposed project. If listed species occur in the area and they likely would be affected, EPA and USFWS would undergo the formal consultation process. This can be, but is not always, an involved process.



- + **Bald Eagle Protection.** The USFWS implements provisions of the Bald Eagle Protection Act by ensuring that development does not affect nest trees.
- + **Migratory Bird Protection.** The USFWS implements provisions of the Migratory Bird Protection Act.
- + **Fish and Wildlife Coordination.** The USFWS also provides technical expertise and makes comments and recommendations to federal agencies via the Fish and Wildlife Coordination Act (16 USC 661 *et seq.*).

#### Mine Safety and Health Administration (MSHA)

- Mine Identification Number
- Miner Training and Retraining Plan Approval
  - + **Mine Identification Number.** Because worker health and safety aspects of the Pogo Mine Project would be regulated by federal health and safety standards, the Applicant must obtain a Mine Identification Number from the Mine Safety and Health Administration (MSHA). Agency representatives would make routine inspections of the operation and also would be involved in educational and safety training programs. The Pogo Mine project would be responsible to provide MSHA with reports of accidents, injuries, occupational diseases, and related data.
  - + **Miner Training and Retraining Plan Approval.** MSHA must approve specific programs for the education, training, and retraining of all employees.

#### Bureau of Alcohol, Tobacco, and Firearms (BATF)

- License to Transport Explosives
- Permit and License for Use of Explosives
  - + **License to Transport Explosives.** Interstate transportation of explosives is regulated by the Bureau of Alcohol, Tobacco, and Firearms (BATF). The Pogo Mine project or its explosive supplier would need to obtain a license for transport of such explosives to the site.
  - + **Permit and License for Use of Explosives.** BATF also would have to issue an Explosives User Permit to the Pogo Mine project.

#### Federal Communications Commission (FCC)

- Radio License
  - + **Radio License.** Radio and microwave station authorizations would need to be obtained from the Federal Communications Commission (FCC). A license must be obtained for any two-way radio installations made at the project site.

#### Federal Aviation Administration (FAA)

- Notice of Landing Area Proposal
- Notice of Controlled Firing Area for Blasting
  - + **Notice of Landing Area Proposal.** An entity proposing to construct a landing area must notify the Federal Aviation Administration (FAA) of the location, length, bearing, and other details of the proposed landing area.
  - + **Notice of Controlled Firing Area for Blasting.** Entities engaged in the use of explosives also must notify the FAA of the location of such areas.



**U.S. Coast Guard (USCG)**

- Bridge Construction Permit Across Navigable Waters
  - + **Construction Permit for a Bridge Across Navigable Waters.** To ensure safe navigability of waterways, construction of a bridge across navigable waters must be approved by the U.S. Coast Guard (USCG).

**State of Alaska**

The State of Alaska is a cooperating agency with EPA for the Pogo Mine project EIS.

**Alaska Department of Natural Resources (ADNR)**

- Plan of Operations Approval
- Upland Mining Lease
- Millsite Lease
- Lease of Other State Lands
- Miscellaneous Land Use Permit
- Road Right-of-Way
- Joint Pipeline Office Approval
- Power Line Right-of-Way
- Certificate of Approval to Construct a Dam
- Certificate of Approval to Operate a Dam
- Temporary Water Use Permit
- Permit to Appropriate Water
- Material Sale
- Burn Permit
- Cultural Resources Authorizations
- Mining License
- Fish Passage
- Fish Habitat Permit
  - + **Plan of Operations Approval.** ADNR must approve the plan of operations for a mining project on state lands. The plan of operations includes the project description, Reclamation Plan, Monitoring Plan, Transportation Plan, and any road maintenance agreements. Reclamation Plan approval includes a mandatory bonding provision, prohibits undue and unnecessary degradation, and contains performance standards requiring that lands be returned to a stable condition. The Reclamation Plan would apply to the upland mining and millsite lease areas.
  - + **Upland Mining Lease.** Prior to initiation of production, the holder of a mining claim or group of claims may request a lease for the purposes of producing minerals from the claims.



- + **Millsite Lease.** Use of state lands for other than temporary purposes requires a lease. This lease requirement includes use of lands for mill sites or other mine support purposes.
- + **Lease of Other State Lands.** The Applicant is considering a lease of state lands near the Richardson Highway for purposes of a bus terminal, shop, storage, road maintenance equipment storage, and parking. If issued, this lease would require a separate Reclamation Plan, insurance, and bonding.
- + **Miscellaneous Land Use Permit.** Any winter road use during project development would be authorized under a separate permit and would require a separate bond and Reclamation Plan.
- + **Access Road Right-of-Way.** A grant of right-of-way (ROW) is required across state lands for roads, power lines, and pipelines. If a road ROW were granted, the Applicant and ADNR would enter into a road maintenance agreement.
- + **Joint Pipeline Office Approval.** Any activities that cross the Trans-Alaska Pipeline System (TAPS), such as the all-season road or winter road ground access options, would require authorization from the Federal/State Joint Pipeline Office.
- + **Power Line Right-of-Way.** A grant of ROW is required across state lands for power lines.
- + **Certificates of Approval to Construct a Dam.** A Certificate of Approval to Construct a Dam is required for the construction, enlargement, alteration, repair (other than routine maintenance), or abandonment of a dam pursuant to Alaska Administrative Code (AAC), Title 11, Chapter 93. Dam construction would be subject to design and supervision by an Alaska registered professional engineer.
- + **Certificate of Approval to Operate a Dam.** A Certificate of Approval to Operate a Dam would be issued by the Division of Mining, Land, and Water after completion of construction and approval of the completion report, as-built drawings, Operations and Maintenance Manual, and if required, an Emergency Action Plan.
- + **Temporary Water Use Permit.** Temporary uses of a significant volume of water, for up to 5 years, requires a Temporary Water Use Permit.
- + **Permit to appropriate Water.** Appropriation of a significant amount of water on other than a temporary basis requires authorization by a Water Rights Permit. A Water Right is a property right for the use of public surface and subsurface waters. The right becomes attached to the land where the water is used. Once use of the appropriated water has been fully developed and demonstrated, a Certificate of Appropriation securing the holder's rights to the water would be issued. This certificate is not automatic; it depends on actual use of the full amount of water and compliance with all permit conditions.
- + **Material Sale.** Material sales (Alaska Statute [AS] 38.05.020) would be used for gravel borrow materials not located within the boundary of the millsite lease or a road ROW. Each site would require a Development Plan that addresses the handling of timber and slash, a bond, and a Reclamation Plan.
- + **Burn Permit.** Anyone wishing to burn outside an incinerator is required to obtain a Burn Permit (AS 41.15.050 and 41.15.060) during the burn season between May 1 and September 30. Whereas the ADEC Permit to Open Burn primarily is concerned with air quality, this ADNR permit primarily is concerned with fire control.



- + **Cultural Resources Authorizations.** A Field Archaeology Permit must be issued from the SHPO for archaeological field work on state lands. The SHPO also would be consulted by the COE as it exercises its National Historic Preservation Act Section 106 responsibilities. The SHPO must concur that cultural resources would not be adversely affected, or that proper procedures would be used to minimize or mitigate impacts that would occur.
- + **Mining License.** A mining license would be required before the mine entered production:
- + **Fish Passage.** AS 16.05.840 (Fishway Act) requires that an individual or governmental agency notify and obtain authorization from ADNR for activities within or across a stream used by fish if the department determines that such uses or activities could represent an impediment to the efficient passage of fish. Culvert installation, stream realignment or diversion, dams, low-water crossings, and construction, placement, deposition, or removal of any material or structure below ordinary high water all require approval from ADNR. Construction activities also must be coordinated with critical spawning periods of anadromous fish.
- + **Fish Habitat Permit (Anadromous Fish Act).** AS 16.05.870 (Anadromous Fish Act) requires that an individual or governmental agency provide prior notification and obtain approval from ADNR "to construct a hydraulic project or use, divert, obstruct, pollute, or change the natural flow or bed" of a specified anadromous water body, or "to use wheeled, tracked, or excavating equipment or log-dragging equipment in the bed" of a specified anadromous water body. All activities within or across a specified anadromous water body and all instream activities affecting a specified anadromous water body require approval from ADNR.

#### Alaska Department of Environmental Conservation (ADEC)

- Certificate of Reasonable Assurance for Section 402 and 404 Permits
- Waste Disposal Permits
- Air Quality Control Permit to Construct and to Operate
- Air Quality Permit to Open Burn
- Approval to Construct and Operate a Public Water Supply System
- Plan Review for Non-Domestic Wastewater Treatment System
- Non-Domestic Wastewater Disposal Permit
- Plan Review and Construction Approval for Domestic Sewage System
- SPCC Plan Review Approval
- Oil Discharge Prevention and Contingency Plan (winter road option only)
- Storm Water Discharge Pollution Prevention Plan
- Food Sanitation Permit
- + **Certificate of Reasonable Assurance for Section 402 and 404 Permits.** Activities involving discharge of wastewater or fill material into waters of the United States are not only governed by the terms and conditions of a CWA Section 402 NPDES Permit from EPA and a CWA Section 404 Permit from the COE, but also require a Certificate of Reasonable Assurance from the State of Alaska. These certificates can only be issued if ADEC can state that the proposed activity would comply with



Section 401 of the CWA and that any discharge would comply with applicable state water quality standards.

- + **Waste Disposal Permits.** A waste disposal permit is required to establish, modify, or operate a waste disposal facility. Public notice is required for this permit, and permits are issued for periods of as long as 5 years. For the Pogo project, definitions of solid waste include the dry stack tailings pile; the tailings with cyanide residue to be redeposited underground; potentially acid-generating waste rock, which could present an environmental problem associated with management of the waste material; and disposal of construction debris and garbage. A soil absorption system also would be covered, and domestic solid waste may be covered.
- + **Air Quality Control Permit to Construct and to Operate.** The construction, modification, and operation of mining facilities that produce air contaminant emissions require a state Air Quality Control Permit to Construct and a separate Air Quality Control Permit to Operate. The determination to require a permit is based on the source location, total emissions, and changes in emissions for sources specified in 18 AAC 50.300(a). Generally, air quality must be maintained at the lowest practical concentrations of contaminants specified in the Ambient Air Quality Standards of 18 AAC 50.020(a) (suspended particulates, sulfur oxides, carbon monoxide, ozone, nitrogen dioxide, reduced sulfur compounds, and lead). An Applicant must submit an application and supplemental information as required by 18 AAC 50.3000(b). Permits are issued for a maximum 5-year period, renewable by the same procedure as the original application.
- + **Air Quality Permit to Open Burn.** If the Applicant were to contemplate open burning of cleared vegetation or non-commercial timber, a separate Air Quality Permit to Open Burn would be required. Whereas the ADNR Burn Permit primarily is concerned with fire control, this ADEC permit primarily is concerned with air quality.
- + **Approval to Construct and Operate a Public Water Supply System.** Prior to start of construction, ADEC must approve, in writing, detailed engineering reports, plans, and specifications for the construction, alteration, or modification of a public water system. Once construction has been completed, ADEC must approve operation of a public water system.
- + **Plan Review for Non-Domestic Wastewater Treatment System.** Plans for disposal of wastewater from milling operations and other non-domestic wastewater sources are required as part of an application for a state Wastewater Disposal Permit and an NPDES Permit. ADEC would review an NPDES application for adequacy under its Section 401 Certificate of Reasonable Assurance authority. ADEC must review and approve treatment facility plans.
- + **Non-Domestic Wastewater Disposal Permit.** ADEC also must authorize the discharge of wastewater into or upon all waters and land surfaces of the state. If injection wells are part of the Wastewater Disposal Plan, the requirements of EPA's Underground Injection Control Class V Wells must be met in the state Non-domestic Wastewater Permit.
- + **Plan Review and Construction Approval for Domestic Sewage System.** The construction and operation of facilities that collect, treat, and dispose of wastewater is governed by a plan review to ensure that minimum standards are applied. Plans for disposal of gray water, sewage, or process water must be reviewed prior to construction of facilities that involve subsurface wastewater disposal. Detailed



engineering reports, plans, and specifications must be certified by a registered professional engineer.

- + **SPCC Plan Review Approval.** ADEC would use its CWA Section 401 certification authority to review the SPCC Plan required by EPA for storage of large quantities of oil.
- + **Oil Discharge Prevention and Contingency Plan.** Approval of an oil discharge contingency plan is required prior to commencement of operation of vessels and oil barges on state waters, or for oil terminal facilities capable of storing 10,000 barrels or more. These contingency plans are reviewed every 3 years. For the Pogo Mine project, this plan would be required only if the winter road access option that would require large fuel storage volumes at the mine site were selected.
- + **Storm Water Discharge Pollution Prevention Plan.** ADEC would use its CWA Section 401 certification authority to review the Storm Water Discharge Pollution Prevention Plans required by EPA for construction activities that would disturb the ground surface and potentially lead to runoff pollution.
- + **Food Sanitation Permit.** Construction and operation of permanent, temporary, and mobile food services, regardless of whether there is a charge for food, are governed by the Alaska Eating and Drinking Establishment Regulations, which include provisions for plan review and issuance of a food service permit.

#### Department of Transportation and Public Facilities (ADOT/PF)

- Driveway Permit
  - + **Driveway Permit.** ADOT/PF uses state highway standards to review and approve plans for modifying, realigning, or constructing state roads, including driveways or roadways entering them.

## 1.9 Existing Permits and Approvals

To date, a number of permits have been obtained by the Applicant during the course of surface and subsurface exploration. The major permits, their nature, and where to find additional information about them are described below.

**Army Corps of Engineers (COE)** – Leroy Phillips, Army Corps of Engineers, P.O. Box 6898, Elmendorf AFB, AK 99506-6898; Phone: (907) 753-2828

- CWA Section 404 (wetlands) permit to fill 14 acres of wetlands to construct access roads and rock storage pads (March 4, 1999)

**Environmental Protection Agency (EPA)** – Cindi Godsey, 222 West 7<sup>th</sup> Avenue, Anchorage, AK 99513; Phone: (907) 271-6561

- NPDES Storm Water Construction General Permit coverage notice (November 2, 1999)

**Alaska Department of Natural Resources (ADNR)** – Steve McGroarty, Division of Mining, Land and Water Management, 3700 Airport Way, Fairbanks, AK 99709-4699; Phone: (907) 451-2795

- Miscellaneous Land Use Permit for use of the Goodpaster Winter Trail (December 22, 1997)



- Approved Plan of Operations and Reclamation Plan for Advanced Exploration (underground) (March 2, 1999)

**Alaska Department of Environmental Conservation (ADEC)** – Pete McGee, Watershed Management, 610 University Avenue, Fairbanks, AK 99709; Phone: (907) 451-2101

- Wastewater Disposal Permit to discharge treated mine drainage by way of an underground injection well (March 1, 1999)

**Alaska Department of Fish and Game (ADFG)** – Jack Winters, Habitat Division, 1300 College Road, Fairbanks, AK 99701; Phone: (907) 459-7289

- Several Fish Habitat Permits for activities potentially affecting anadromous fish streams and fish passage (equipment crossing streams, water withdrawal, ice bridges)

## 1.10 EIS Structure

The format and content of this EIS follows the CEQ regulations at 40 CFR 1502 and EPA's regulations at 40 CFR 6 Subpart F. The purpose of the EIS is to evaluate the overall direct, indirect, and cumulative impacts of the project alternatives on the mine area as well as adjacent areas. The structure of the EIS accomplishes this evaluation in a four-step process.

First, in Chapter 2 (Alternatives), the project options and alternatives that have been considered by EPA are discussed. The chapter describes how scoping issues were identified, explains how evaluation criteria were developed and how options were screened, and discusses how the alternatives were identified and evaluated. It describes the Applicant's Proposed Project as well as the alternatives, including the No Action Alternative.

In the second step, Chapter 3 (Affected Environment) describes the environment of the project area as it exists today, *before* the project is developed. This description provides a basis against which project development impacts may be measured.

In the third step, Chapter 4 (Environmental Consequences) describes the environmental impacts of the Proposed Action and alternatives, determines the degree of those impacts on the human environment, and discusses whether those impacts could be mitigated. Figuratively, the EIS superimposes the project description (Chapter 2) on the existing environment (Chapter 3) to determine whether impacts would occur (Chapter 4).

